

A black rectangular sign with a curved top and bottom, mounted on a black pole. The sign features the text "Welcome to" in white, "Frederick" in a large, gold-colored script font, "Maryland" in a smaller gold-colored serif font, and "Founded 1745" in white. The sign is set against a background of green trees.

Welcome to  
*Frederick*  
Maryland  
Founded 1745

# CITY OF FREDERICK

Disparity Study Report  
March 2021

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## I. INTRODUCTION

In February 2020, the City of Frederick contracted with Griffin & Strong, P.C. (“GSPC”) to conduct an updated disparity study to evaluate the existence of discrimination in City contracting. In addition, the Study independently assessed current and proposed Minority and Women owned business enterprise programs, policies, and procedures. Governmental entities, such as the City of Frederick, have utilized disparity studies as a tool to respond to the Supreme Court’s decision in, City of Richmond v. J.A. Croson Co.<sup>1</sup> and the cases which followed, to determine whether there has been a compelling interest for remedial procurement programs, based upon ethnicity, race, and gender.

The Study collected and analyzed relevant data on businesses in the industries of:

1. Construction
2. Construction Related Professional Services
3. Professional Services
4. Other Services
5. Goods

The disparity study (“Study”) analyzes the five (5) year period from July 1, 2013 - June 30, 2018 (FY2014-FY2018) (“Study Period”).

### A. Objectives

The principal objectives of this study are:

1. Is there is a statistically significant disparity in the relevant geographic and product markets between the percentage of qualified Minority and Women owned firms (“MWBE”), willing and able to provide goods or services to the City of Frederick in each category of contracts and the percentage of such firms actually utilized by the City of Frederick (whether as prime contractors/consultants or subcontractors/consultants)?
2. If a statistically significant disparity exists, have factors, other than race and gender, been ruled out as the cause of that disparity, such that there can be an inference of discrimination?
3. If there is an inference of discrimination, can the discrimination be adequately remedied with race-neutral and gender- neutral remedies?
4. If there is an inference of discrimination and race and gender neutral remedies are not sufficient, does the evidence from the Study legally support a race and/or gender-conscious remedial program?
5. If there is an inference of discrimination, are the proposed remedies narrowly tailored to the strong basis in evidence from the Study?

<sup>1</sup> City of Richmond v. J.A. Croson Co., 488 U.S. 469 (1989).

## B. Technical Approach

In conducting this Study and preparing its recommendations, GSPC followed a carefully designed work plan that allowed Study team members to fully analyze availability, utilization, and disparity about MWBE participation. The final work plan consisted of, but was not limited to, the following major tasks:

- Establishing data parameters and finalizing a work plan;
- Legal analysis;
- Policy and procurement process review and remedial program analysis;
- Collecting, organizing, and cleaning data;
- Conducting market area analyses;
- Conducting product market analysis;
- Conducting utilization analyses;
- Estimating the availability of qualified firms;
- Analyzing the utilization and availability data for disparity and significance;
- Conducting private sector analysis including credit and self-employment analysis;
- Collecting and analyzing anecdotal information; and
- Preparing a final report that presents race- and gender-neutral and narrowly tailored race- and gender-based remedies.

## C. Report Organization

This report is organized into the following sections, which provide the results of GSPC's quantitative and qualitative analysis. In addition to this introductory chapter, this report includes:

- Chapter II, the Executive Summary including a summary of the findings and recommendations based on the analysis.
- Chapter III, which presents a legal overview of disparity studies and the requirements for race- and gender-conscious programs.
- Chapter IV, which provides a review of the City of Frederick's purchasing policies and practices, particularly as they relate to Minority and Women owned firms.
- Chapter V, which presents the methodology used in the collection of statistical data from the City of Frederick's and the analyses of those data as they relate to relative MWBE utilization and availability for prime contractors and subcontractors.
- Chapter VI, which presents an analysis of disparities, if any, in the private sector.
- Chapter VII, which provides the analysis of anecdotal data collected from the survey of business owners, personal interviews, focus groups, public hearings, organizational meetings, and emailed comments.
- Chapter VIII, Study Conclusion.

Note: Study Definitions are contained in Appendix A.

## II. EXECUTIVE SUMMARY OF FINDINGS AND RECOMMENDATIONS

This chapter presents the findings and recommendations resulting from the Study for the City of Frederick related to Construction, Construction related Professional Services, Professional Services, Other Services, and Goods for the five (5) year period of FY2014-FY2018.

As outlined in the Legal Analysis, the courts have indicated that for race-based or gender-based preference programs to be maintained there must be a strong basis in the evidence for the establishment of such programs or the continuation of existing programs. As the detailed findings below will demonstrate, GSPC found statistically significant underutilization of MWBEs in all five (5) Industry Categories that GSPC analyzed. A regression analysis was performed and found that there was evidence to indicate that the disparities by race, ethnicity, or gender status of the firm owners remained after controlling for capacity and other race and gender-neutral factors. This statistical evidence found support in the anecdotal evidence of the experiences of firms in the City of Frederick's marketplace.

### A. Legal Findings

#### **Finding 1: Legal**

Consistent with the “narrow tailoring” aspect of the strict scrutiny analysis, the City of Frederick continues to implement race- and gender-neutral measures to try to increase utilization of MWBE firms, but the present Study shows that those measures have not been effective in ameliorating the identified disparities.<sup>2</sup> Accordingly, the City has a basis to introduce race- and gender-conscious remedies or policies toward that goal.<sup>3</sup>

Moreover, the use of a regression analysis and consideration of the contracting environment in the private sector as part of this Study allow the City to demonstrate that factors other than MWBE status cannot fully account for the statistical disparities found. Stated otherwise, the City can show that MWBE status continues to have an adverse impact on a firm's ability to secure contracting opportunities with the City of Frederick, further supporting more aggressive remedial efforts.

Lastly, having obtained statistical and anecdotal evidence of disparities that are race-, ethnicity-, and gender-specific, the City can ensure that the more robust remedies considered as a result of this Study can be limited to race and gender groups for which underutilization and an inference of discrimination has been identified.<sup>4</sup>

<sup>2</sup> See Croson, 488 U.S. at 507-08.

<sup>3</sup> Id.

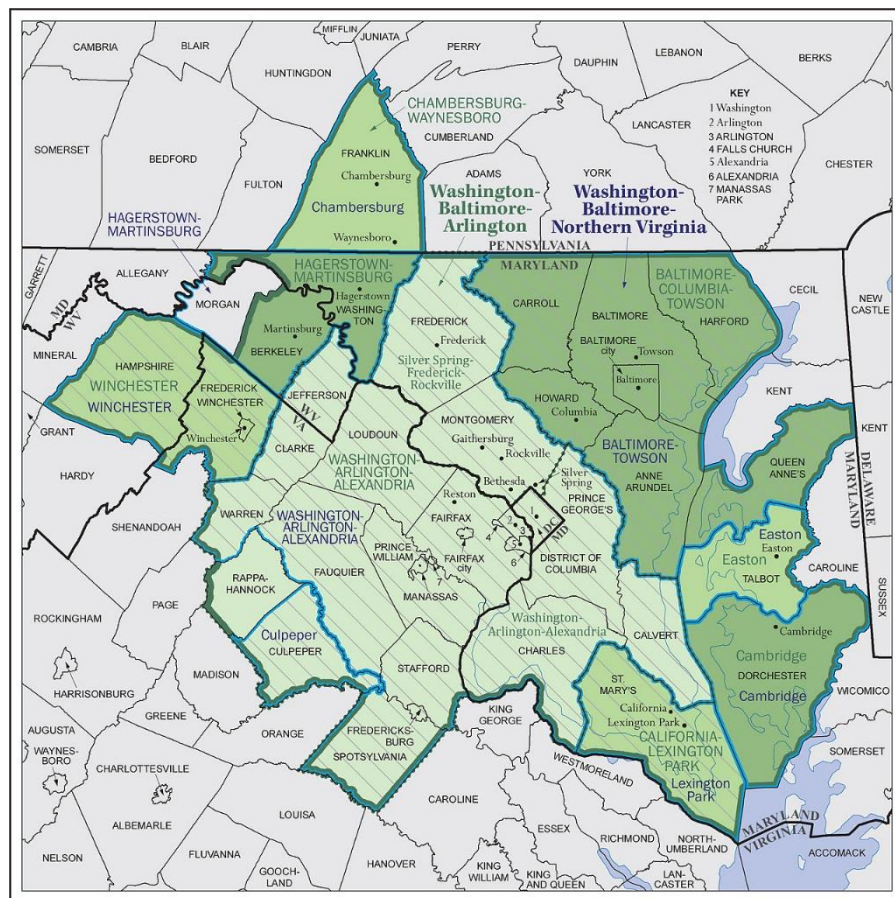
<sup>4</sup> Id.; see also H.B. Rowe Company, Inc. v. W. Lindo Tippet, 615 F.3d 233, 256-58 (4<sup>th</sup> Cir. 2010) (finding strong basis in evidence for remedial action for African American and Native American firms, but no similar basis for inclusion of other Minority groups (including Women-owned businesses) in the remedial policy).

## B. Quantitative Findings

### Finding 2: Geographical Relevant Market

The Relevant Market summarizes the geographical area where at least 75% of prime awardees were in each industry. In analyzing the Relevant Market data, GSPC tabulated the percentage of dollars awarded, beginning with the City of Frederick (by zip codes). GSPC continued counting in radius surrounding the City of Frederick until the cumulative percentage was equal to or greater than 75%. The Availability and utilization analyses were conducted only on firms with offices within the geographical markets. The results were that the relevant market for the Study Period (FY 14-18) in all Industry Categories was the Washington-Baltimore-Arlington, DC-MD-VA-WV-PA Combined Statistical Area (CSA).

Figure 1: Washington-Baltimore-Arlington, DC-MD-VA-WV-PA Combined Statistical Area (CSA) Map





### Finding 3: Availability

The measures of Availability in this disparity study incorporate all of the criteria of Availability required by Croson:

- The firm does business within an industry group from which the City of Frederick makes certain purchases.
- The firm's owner has taken steps to demonstrate interest in doing business with government.
- The firm is located within a relevant geographical area such that it can do business with the City of Frederick.

The firms used to calculate Availability came from the Master Vendor File<sup>5</sup>. GSPC found that firms were available to provide goods and services to the City as reflected in the following percentages by each race, ethnicity, and gender group.

*Table 1: Summary of Availability Estimates by Industry Category*

In the respective Relevant Markets  
(Based upon the Master Vendor File)  
City of Frederick Disparity Study

Race/Ethnicity	Construction	Architecture & Engineering	Professional Services	Other Services	Goods & Supplies
African American	19.95%	13.96%	18.88%	15.57%	7.55%
Asian American	3.48%	11.97%	3.30%	3.08%	1.29%
Hispanic American	8.57%	3.42%	2.23%	2.74%	1.10%
Native American	1.47%	1.14%	0.93%	1.33%	0.74%
Total MBE	33.47%	30.48%	25.34%	22.71%	10.68%
Women	7.50%	8.83%	5.38%	5.73%	4.33%
Unidentified MWBE	0.40%	0.57%	0.86%	0.68%	0.92%
Total MWBE	41.37%	39.89%	31.59%	29.13%	15.93%
Non-MWBE	58.63%	60.11%	68.41%	70.87%	84.07%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

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<sup>5</sup> The Master Vendor File used the following sources Innoprise Vendors (Current), Ionwave Supplier Vendors (Current), County of Frederick Minority Business Directory (Current), DC Certified List (Current), City of Frederick Bidders (FY 18), Frederick Airport Subcontractors (Study Period), City of Frederick Subcontractor Solicitation List (FY 14-17)

**Finding 4: Overall Prime MWBE Utilization and Prime Plus Subcontracting Utilization**

As the table below shows, City of Frederick awarded a total of \$91,192,290 in prime spending in the Relevant Market during the study period and \$22,887,373 of this amount, or 25.09% of this amount was awarded MWBE firms as prime contractors. Of these MWBE awards, 96.58% was to a single Minority firm. These numbers represent awards on formal solicitations of \$50,000 and over.

*Table 2: Summary of Prime Utilization for FY2014-FY2018*

By Award Dollars in the Relevant Markets  
(Based upon the Master Payment File)  
City of Frederick Disparity Study

Race/Ethnicity	Construction		Architecture & Engineering		Professional Services		Other Services		Goods & Supplies	
	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$191,781	4.87%	\$0	0.00%
Asian American	\$22,103,239	29.01%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%
Hispanic American	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$84,583	2.15%	\$0	0.00%
Native American	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%
Total MBE	\$22,103,239	29.01%	\$0	0.00%	\$0	0.00%	\$276,364	7.01%	\$0	0.00%
Women	\$0	0.00%	\$507,770	15.59%	\$0	0.00%	\$0	0.00%	\$0	0.00%
Total MWBE	\$22,103,239	29.01%	\$507,770	15.59%	\$0	0.00%	\$276,364	7.01%	\$0	0.00%
Non-MWBE	\$54,082,960	70.99%	\$2,748,898	84.41%	\$6,723,552	100.00%	\$3,664,596	92.99%	\$1,084,911	100.00%
Total	\$76,186,199	100.00%	\$3,256,668	100.00%	\$6,723,552	100.00%	\$3,940,960	100.00%	\$1,084,911	100.00%

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As the table below shows, City of Frederick spent \$24,703,066, or 27.04% with MWBE firms as prime contractors and subcontractors. About 24.02% of total utilization was with Asian American firms in Construction.

*Table 3: Summary of Total Utilization for FY2014-FY2018*

By Award Dollars in the Relevant Markets  
(Based upon the Master Payment File)  
City of Frederick Disparity Study

	Construction		Architecture & Engineering		Professional Services		Other Services	
	\$	%	\$	%	\$	%	\$	%
African American	\$ 330,000	0.43%	\$ -	0%	\$ 14,704	0.22%	\$ 191,781	4.87%
Asian American	\$ 21,789,239	28.72%	\$ 190,843	5.86%	\$ 186,327	2.77%	\$ -	0%
Hispanic American	\$ 82,069	0.11%	\$ -	0%	\$ -	0%	\$ 84,583	2.15%
Native American	\$ 201,000	0.26%	\$ -	0%	\$ -	0%	\$ -	0%
Total MBE	\$ 22,492,308	29.52%	\$ 190,843	5.86%	\$ 201,031	2.99%	\$ 276,364	7.01%
Women	\$ 827,885	1.09%	\$ 714,634	21.94%	\$ -	0%	\$ -	0%
Total MWBE	\$ 23,320,194	30.61%	\$ 905,477	27.80%	\$ 201,031	2.99%	\$ 276,364	7.01%
Non-MWBE	\$ 52,866,005	69.39%	\$ 2,351,191	72.20%	\$ 6,522,521	97.01%	\$ 3,664,595	92.99%
Total	\$ 76,186,199	100.00%	\$ 3,256,668	100.00%	\$ 6,723,552	100.00%	\$ 3,940,959	100.00%

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**Finding 5: Summary Of Disparity Analysis For FY2014-FY2018**

The tables below indicate those MWBE groups (with a check mark) where a statistically significant underutilization was found.

*Table 4: Summary of Disparity Analysis of MWBE Underutilization in Prime Contracting*

City of Frederick Disparity Study

	Construction	A&E	Professional Services	Other Services	Goods Supplies &
<b><i>African American</i></b>	✓	✓	✓	✓	✓
<b><i>Asian American</i></b>		✓	✓	✓	✓
<b><i>Hispanic</i></b>	✓	✓	✓	*	✓
<b><i>Native American</i></b>	✓	✓	✓	✓	✓
<b><i>Women</i></b>	✓		✓	✓	✓

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\*Occurrences in this group were too small to measure.

Table 5: Summary of Disparity Analysis of Total Utilization (Prime and Subcontractor Awards)

City of Frederick Disparity Study

	Construction	A&E	Professional Services	Other Services
<b><i>African American</i></b>	✓	✓	✓	✓
<b><i>Asian American</i></b>		✓	**	✓
<b><i>Hispanic</i></b>	✓	✓	✓	✓
<b><i>Native American</i></b>	✓	✓	✓	✓
<b><i>Women</i></b>	**		✓	✓

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\* Occurrences in this group were too small to measure.

\*\* Firms in this group were underutilized, but it was not statistically significant.



### C. Policy Findings

#### **Finding 6: City Procurement and DBE Utilization**

Procurement at the City is highly centralized in the Purchasing Department and is guided by the City's Purchasing Policies and Procedures Manual, and to a lesser extent by Maryland state law. The Policy Manual has not been updated since 2013. The primary procurement barriers cited by DBE survey respondents were competing with large firms (25.5 %) and excessive experience requirements (17.6%).

The City does not have a race or gender-based goals program or any other race or gender conscious policy. The City expressly encourages department heads conducting informal purchasing (contracts less than \$50,000) to include DBEs "whenever possible," and includes in its policies and procedures for contracts that are competitively bid a requirement that good faith efforts be undertaken to achieve DBE participation.

#### **Finding 7: Bonding and Insurance**

Performance bonds and payment bonds are required for contracts above \$20,000, with the bond amount (or percentage) set by the Legal Department in consultation with the Purchasing Manager. Bid bonds may be required for larger construction contracts, but there is no formal or written policy in that regard. About 10.3% of DBE survey respondents reported performance bonds as a barrier to bidding on or performing on City projects.

Insurance requirements are established cooperatively between the Purchasing Manager, the Legal Department, and the Risk, Safety, and Compliance Department. About 5.4% of DBE survey respondents reported insurance requirements as a barrier to bidding on or performing on City projects.

#### **Finding 8: Prompt Payment**

City purchasing is subject to the Maryland prompt payment statute. Purchasing staff was not clear on the prompt payment requirements under state law but interviews nonetheless indicated that invoices were generally paid in 30 days or less, which is in accord with the state law. Only 1% of DBE survey respondents reported being paid in over 60 days.

#### **Finding 9: Vendor Rotation**

Awards for contracts or projects under \$10,000 are subject to "noncompetitive pricing," but the City's Policy Manual provides that department heads making such awards are to rotate purchases among qualified vendors. This is the only situation in which the City engages in vendor rotation.

#### **Finding 10: Registration and Certification**

The City does not maintain any prequalification lists and prospective vendors need not register with the City in order to bid on a contract / project. New bid software (ION WAVE) permits self-registration by bidders, but this program was not in place throughout the study period. Bidder's lists are not maintained by the City, but a vendor's list is generated using award information.

The City requires certification for participation in the DBE Program; it accepts certifications from the State of Maryland and independently certifies vendors on a case-by-case basis. The City also accepts certifications from several other public entities in an effort to be inclusive and afford greater opportunity.

### **Finding 11: Good Faith Efforts**

Good faith efforts are reviewed using various forms required by the City as part of the contract packet, but interviews indicated that the issue of whether good faith efforts by a bidder or awardee have been sufficient is largely a subjective matter for the Purchasing Department. A bidder can be deemed non-responsive by the Purchasing Manager absent good faith efforts.

### **Finding 12: Local Preference Program**

The City provides bid preferences to local businesses (located either in the City and/or the State), including a preference for bids by City businesses that are within 10% of the lowest quote or bid, and a preference for State businesses within 5% of the lowest bid. These preferences are limited to \$3,000 for a City business and \$1,500 for a State business.

#### **D. Anecdotal Findings**

### **Finding 13: No Accountability for Good Faith Efforts**

The conduct of prime contractors in their engagement with subcontractors and DBE firms in the City of Frederick marketplace was a concern for a number of participants. Among the concerns was that primes are not held accountable if they say they cannot find capable DBEs.

### **Finding 14: Policies With Inequitable Results**

Inconsistencies in procurement policies hindered participation for DBEs, and in some cases created unintended advantages for firms already in a privileged position.

### **Finding 15: Informal Networks**

More than 44% of the survey respondents reported that an informal network impeded their ability to win work with the City. African Americans – representing just over 47% of that number – made up the majority of those respondents expressing belief that this informal network exists. Meanwhile, the relative percentage of their Non-Minority Male counterparts who shared such sentiment was 25%.

### **Finding 16: Vendor Registration**

About 66% of DBE respondents said they were not aware that they should or could register to do business with the City of Frederick. 21% said they did not know how to register to register with the City. In other anecdotal forums, DBE respondents said that Frederick was not on their radar scope for bid opportunities until we reached out for them to participate in this Study.

### **Finding 17: Utilizing MWBEs**

More than 35% of MWBE respondents agreed that prime contractors will include a Small, Minority, Woman, or LGBTQ business on a proposal to meet requirements or expectations of the City, then drop the firm after winning the bid. Over 45% say some Non-Minority primes will only utilize DBEs when required to do so by the City.

## **E. Private Sector Findings**

A descriptive and inferential private sector analysis of the Frederick Market Area revealed that in general, being an MWBE in the Frederick Market Area is associated with lower firm revenue, and lower self-employment likelihoods, which lends some support to the “but-for” justification for affirmative action in public procurement. Lower revenues for MWBEs in the Frederick Market Area are suggestive of private sector discrimination that undermines their capacity to enter the market and compete with non-MWBEs firms for public contracting and subcontracting opportunities.

**Finding 18:** A building permit analysis suggests that MWBEs in the City of Frederick (“City”) face barriers to participating in the local market economy.

**Finding 19:** In general, the regression results suggest that firms owned by Black Americans, are particularly harmed by perceived discrimination against them by the City.

**Finding 20:** We find that among MWBEs in the Frederick Market Area, firms classified as disadvantaged, and owned by Women are relatively more likely to have their capacity to compete in the market for public procurement constrained as a result of private sector credit market discrimination.

**Finding 21:** Relative to non-MWBEs—the excluded group in the CRM specification—disadvantaged firms have more bank loan denials, as the estimated odds ratio is greater than unity and statistically significant in this instance. When disaggregated by the race/ethnicity/gender of owners, the results suggest that firms owned by Black Americans and Native Americans have more commercial bank loan denials relative to non-MWBEs.

**Finding 22:** Firms owned by Black Americans and Asian Americans, are more likely to be new firms, as the estimated odds ratio is greater than unity and statistically significant in those instances. To the extent that market experience is an important determinant of and correlated with success in bidding and securing public contracts, this suggests that for these MWBEs, their relative inexperience in the market may partially explain disparities in public contracting between MWBEs and non-MWBEs in the Frederick Market Area, as tenure in the market also implies similar knowledge/experience about bidding and securing public

contracts.

**Finding 23:** There are no differences in bid submissions between broadly classified MWBEs and non-MWBEs. This suggests that for these type of MWBEs, relative to non-MWBEs any differential success in public contracting outcomes in the Frederick Market Area cannot be explained by lower bid submissions.

## F. Recommendations

### **Recommendation 1: Allocation of Resources, Including Staffing**

In order to operate the race and gender conscious MWBE Program as GSPC herein recommends, the City will need to add at least one full time Contract Compliance staff person with support from the Procurement to assist in forecasting, prebid conferences certification review, maintaining availability lists, coordinating supportive services, and coordinating with other agencies. The Contract Compliance staff person would be responsible for working with MWBEs to make sure they are bidding, investigation of Good Faith Efforts, tracking participation, and reporting participation.

Providing a reasonable budget and having sufficient staff are critical to a successful program.

### **Recommendation 2: MWBE Subcontracting Goals with Definitive Good Faith Efforts Requirements**

#### a) Annual Goals

All MWBE groups were underutilized except Asian American owned firms in Construction both as prime and subcontractors, Women owned firms in A&E both as prime and subcontractors.<sup>6</sup> For those groups that were not the exception, the Study provides a basis for the City to have a race and gender-based subcontractor program. The City should set separate MBE and WBE goals.

The MBE annual goals should be based upon the combined availability of all ethnic groups in order to gain an incentive for Prime Contractors to utilize firms owned by all ethnic Minority groups. However, it is equally important for the City to monitor those contract goals and adjust them, if necessary, if the relative balance of the utilization of Minority groups is out of line with the individual race/ethnicity group availability.

Although availability percentages are what should be expected in terms of MWBE utilization, those percentages may be adjusted to start with annual goals which continuously walk toward availability but are reasonable for the City to meet. For example, availability for MBE firms in A&E is 30.48% and attainment in prime utilization was zero and subcontractor utilization was 5.86%. To set a 30.48% goal for the first year with a relatively new program, would likely build in failure. GSPC will work with the City to set reasonable annual goals to be met by combining prime and subcontractor participation.

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<sup>6</sup> Hispanic owned firm occurrences were too small to analyze in Other Services.

### b) Contract by Contract Goals

GSPC recommends that in addition to overall annual goals, that the City set contract by contract goals in Construction and A&E only on larger projects where there are the most subcontracting opportunities in order to start the program and manage it with a small staff.

If firms do not meet the MWBE contract-by-contract goals, they should demonstrate Good Faith Efforts. If a firm does meet the MWBE goals or does not satisfy Good Faith Efforts, they should be deemed non-responsive and their bid should be rejected.

### c) Contract Compliance

Further, to effectively administer an MWBE subcontracting program, even with a small staff, the City must institute all aspects of contract compliance including monitoring to make sure that prime contractors utilize firms as committed to in their bid package.

- **Assessment** – An initial assessment of MWBE availability and capacity should be performed to determine what firms are actively capable of performing the required scopes or that could be prepared to perform certain scopes. To the extent possible, this should be done with interested firms on a one-on-one basis, particularly local Frederick firms.
- **Outreach** – It is important that the City let the MWBE business community know that the City wants to do business with them and that the City is willing to work with firms to create opportunities and assist them in building capacity.
- **Certification/Verification** – GSPC has not recommended that the City certify MWBEs, but it should accept all bona fide certifications. Further, the City should continue to encourage and assist firms in getting certified as an MWBE or DBE.
- **Procurement** – The City should carefully consider the development of solicitation (bid/proposal) packages to ensure that each one supports maximum opportunities for MWBE participation, as a prime or subcontractor. Also, all applicable solicitation packages and awarded contracts should include the MWBE commitments as contract terms.
- **Monitoring** – It is essential that there is close monitoring of vendor performance and the efficient closeout of projects to verify that MWBE firms are actually performing the work that they contracted to perform and that they are compensated in a timely manner and in the amounts committed.

### **Recommendation 3: Small Business Reserve Program**

Availability estimates demonstrate that there are sufficient numbers of MWBE firms that can do the work of prime contractors. GSPC recommends instituting a race and gender-neutral program that designates



certain contracts, particularly in Construction, that can only be bid on by small businesses. GSPC recommends projects that are under \$50,000 be set aside for this program. This is an excellent way to get firms that have only worked as subcontractors to bid as prime contractors and grow their capacity. This will ultimately result in more competition in the marketplace. But it is important to provide supportive services to firms making this transition.

#### **Recommendation 4: Strengthen Forecasting**

Planning plays an important role in establishing and maintaining effective remedial programs. This begins with understanding what services and goods the City will be buying in the year to come.

- **Targeted Outreach-** Annual forecasting will enable the contract compliance personnel to target firms that are capable of doing the work for notification of the work. This is important so that firms, including those outside of construction are aware of upcoming opportunities;
- **Encourage Teaming-** Knowing ahead of time what work will be presented in the coming year will give room for contract compliance to schedule networking events and encourage firms to team. It also gives more time for mandatory pre-bid conferences where potential prime contractors can meet potential subcontractors.

#### **Recommendation 5: Supportive Services**

Annual forecasting will allow the City to provide supportive services well in advance of the bid issuance, if needed. Supportive services may be offered internally in coordination with other agencies, the Small Business Administration bonding program, and any identified not for profit business development centers. This is particularly important on any future large capital projects to insure diverse supplier participation.

#### **Recommendation 6: Data Reform**

- a) Formally capture award identifiers in payment data and capture all awards.

GSPC found that the payment records did not always reference an award identifier like a solicitation number when relevant. There is also no proper field in the payment system to capture this type of data. Because of this, connecting payments to awards is not currently possible.

To properly connect payment data to awards, there should be a formal field for award identifier in the payment data. Further, award data should be consistently tracked, included awards under \$50,000.

GSPC made use of both General Ledger Codes and NIGP Codes to classify payments into an Industry Category. Certain ledger codes were too vague and did not cover all Industry Categories needed so manual work was required to categorize those types of payments. NIGP codes is the preference and it is recommended to become standard practice at the payment level.

b) Standardize the use of NIGP Codes

GSPC also found that the NIGP codes that are being used by the City are not standard NIGP codes. These should be updated to the standard codes used by all governments.

Once this is implemented, NIGP code 96258 (Professional Services) should be discouraged for the sake of aiding future studies. We find this code does not always fit a Study's categorization of Professional Services. Generally, the vaguest codes start with a 961 or 962 and more specific alternatives should be attempted to be used first before using any code with that prefix.

c) Implement subcontractor data system

GSPC found there was informally maintained word documents being used for tracking subcontractors, with the final year of the study period (FY 18) having no tracked subcontractors.

A proper relational database system for all subcontractor records the City tracks should exist, even something as simple as a Microsoft Access database. This system should also have a field which can reference the prime solicitation/award number.

d) Require business name in building permits

GSPC found that there was no requirement to track the name of the business in building permit data. Because of this, a large percentage of permits had to be excluded solely because the business name of the issued permit was an individual's name. Because only business names can be verified against a certified list, we were not able to include those permits.

We recommend that the point in the data capturing process where this field is being captured be isolated and amended to improve data quality for future studies.

### III. LEGAL ANALYSIS

#### A. Introduction

There is important historical background guiding the development of disparity studies, which effectively began in the United States Supreme Court thirty years ago and has been carried forward to the present time by federal and state courts faced with legal challenges to Minority and Women Owned Business Enterprise (M/WBE) and/or Disadvantaged Business Enterprise (DBE) programs and policies.

The parameters of the current study by Griffin & Strong, P.C. (GSPC) of the DBE Program administered by the City of Frederick (the “City” or “Frederick”), and the various methodologies employed therein, are informed by the applicable case law and decades of experience in all aspects of the fields of inclusion programs and disparity studies.

As an initial matter, the City’s DBE Program does not employ percentage-based utilization goals, project/contract set-asides, bid preferences, or similar advantages for DBEs. Rather, the DBE Program provides that “[p]urchases of goods or services from bona fide Minority vendors will be made whenever possible, providing cost, quality and service are equal[.]” and that “[a]ll bidders shall make good faith efforts to subcontract a portion of the prime contract to small business concerns owned and controlled by socially and economically disadvantaged individuals (i.e. DBEs)[.]”<sup>7</sup> The DBE Program covers Minority Owned Business Enterprises, Women Owned Business Enterprises, and LGBTQ Owned Business Enterprises - collectively referred to as DBEs or “MWBEs.”

GSPC respectfully provides in this Legal Analysis chapter of the overall study a discussion of the bedrock judicial decisions inviting increased use of disparity studies, and a deeper dive into the legal considerations and related evidentiary requirements for sustaining inclusion programs in the face of a challenge on constitutional grounds. Also included in this analysis are significant decisions from the United States Court of Appeals for the Fourth Circuit, as these decisions demonstrate the continuing significance of the featured United States Supreme Court precedent and highlight the legal foundation under which any challenge to Frederick’s DBE Program would be analyzed.

Lastly, upon completion of the Disparity Study GSPC will provide the City with proposed findings and recommendations regarding its DBE Program, with reference to legal considerations that may support or otherwise be implicated by a particular recommendation, including one that includes race-conscious, gender-conscious, or sexual preference-conscious policies or remedies. This underscores the importance of the following legal analysis for the City’s consideration.

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<sup>7</sup> See City of Frederick Purchasing Policies and Procedures Manual (2013 - current), Section III(B), and Attachment 1 (Disadvantaged Business Enterprise Program Requirement).

## B. Historical Development of the Relevant Law Regarding M/WBE Programs

The outgrowth of disparity studies was in large measure a response to constitutionally based legal challenges made against federal, state, and local Minority business enterprise programs enacted to remedy past or present discrimination (whether real or perceived). Such studies were effectively invited by the United States Supreme Court in rendering its seminal decision in City of Richmond v. J. A. Croson Company, 488 U.S. 469; 109 S. Ct. 706; 102 L. Ed. 2d 854 (1989), and subsequent judicial decisions have drawn a direct line between Croson and the utilization of disparity studies. See, for example, Adarand Constructors, Inc. v. Slater (Adarand III), 228 F.3d 1147, 1172-73 (10th Cir. 2000) (“Following the Supreme Court's decision in Croson, numerous state and local governments have undertaken statistical studies to assess the disparity, if any, between availability and utilization of Minority-owned businesses in government contracting.”).

Disparity studies have therefore become an important tool for governmental entities in deciding whether to enact Minority business programs or legislation, and in justifying existing programs or legislation in the face of constitutional challenge. To better understand the proper parameters of such programs, one must understand their judicial origin.

### 1. The Supreme Court's Decision in City of Richmond v. Croson

To fully appreciate the usefulness of disparity studies for development and defense of Minority business programs, an overview of the Croson decision is helpful.

Laws that, on their face, favor one class of citizens over another, may run afoul of the Equal Protection Clause of the Fourteen Amendment. DBE/MBE/WBE programs and legislation are among the types of laws invoking such concerns. Depending on the nature of the differentiation (e.g., based on race, ethnicity, gender), courts evaluating the constitutionality of a Minority business program will apply a particular level of judicial scrutiny. As explained at greater length below, race-based programs are evaluated under a “strict scrutiny” standard, and gender-based programs may be subject to strict scrutiny or under a less-rigorous “intermediate scrutiny” standard, depending on the federal circuit within which the entity sits.

In its Croson decision, the Supreme Court ruled that the City of Richmond's Minority Business Enterprise (hereinafter “MBE”) program failed to satisfy the requirements of “strict scrutiny.” “Strict scrutiny” review involves two co-equal considerations: First, the need to demonstrate a compelling governmental interest; Second, implementation of a program or method narrowly-tailored to achieve/remedy the compelling interest. In Croson, the Supreme Court concluded that the City of Richmond failed to show that its Minority set-aside program was “necessary” to remedy the effects of discrimination in the marketplace.

In fact, the Court found that the City of Richmond had not established the necessary factual predicate to infer that discrimination in contracting had occurred in the first place. The Court reasoned that a mere

statistical disparity between the overall Minority population in Richmond (50% African-American) and awards of prime contracts to Minority-owned firms (0.67% to African-American firms) was an irrelevant statistical comparison and insufficient to raise an inference of discrimination.

Addressing the disparity evidence that Richmond proffered to justify its MBE program, the Court emphasized the need to distinguish between “societal discrimination,” which it found to be an inappropriate and inadequate basis for social classification, and the type of identified discrimination that can support and define the scope of race-based relief.

Specifically, the Court opined that a generalized assertion of past discrimination in an entire industry provided no guidance in determining the present scope of the injury a race-conscious program seeks to remedy, and emphasized that “there was no direct evidence of race discrimination on the part of the City in letting contracts or any evidence that the City’s prime contractors had discriminated against Minority-owned subcontractors.”<sup>8</sup>

Accordingly, the Court concluded there was no prima facie case of a constitutional or statutory violation by anyone in the construction industry that might justify the MBE program. Justice O'Connor nonetheless provided some guidance on the type of evidence that might indicate a proper statistical comparison:

[W]here there is a significant statistical disparity between the number of qualified Minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise. [*Croson*, 488 U.S. at 509]

Stated otherwise, the statistical comparison should be between the percentage of MBEs in the marketplace qualified to do contracting work (including prime contractors and subcontractors), and the percentage of total government contract awards (and/or contractual dollars paid) to Minority firms. The relevant question among lower federal courts has been which tools or methods are best for such analysis; a matter addressed in the detailed discussion of statistical comparison provided below.

Additionally, the Court in *Croson* stated that identified anecdotal accounts of past discrimination also could provide a basis for establishing a compelling interest for local governments to enact race-conscious remedies. However, conclusory claims of discrimination by City officials, alone, would not suffice, nor would an amorphous claim of societal discrimination, simple legislative assurances of good intention, or congressional findings of discrimination in the national economy. In order to uphold a race- or ethnicity-based program, the Court held, there must be a determination that a strong basis in evidence exists to support the conclusion that the remedial use of race is necessary.

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<sup>8</sup> *Croson*, 488 U.S. at 480.



Regarding the second prong of the strict scrutiny test, the Croson Court ruled that Richmond's MBE program was not narrowly tailored to redress the effects of discrimination. First, the Court held that Richmond's MBE program was not remedial in nature because it provided preferential treatment to minorities such as Eskimos and Aleuts, groups for which there was no evidence of discrimination in Richmond. Thus, the scope of the City's program was too broad.

Second, the Court ruled that the thirty percent (30%) goal for MBE participation in the Richmond program was a rigid quota not related to identified discrimination. Specifically, the Court criticized the City for its lack of inquiry into whether a particular Minority business, seeking racial preferences, had suffered from the effects of past discrimination.

Third, the Court expressed disappointment that the City failed to consider race-neutral alternatives to remedy the under-representation of minorities in contract awards. Finally, the Court highlighted the fact that the City's MBE program contained no sunset provisions for a periodic review process intended to assess the continued need for the program.<sup>9</sup>

Subsequent to the decision in Croson, the Supreme Court and the federal Circuit Courts of Appeal have provided additional guidance regarding the considerations, measurements, information, and features surrounding a DBE/MBE/WBE program which will assist in protecting the program from constitutional challenge under a strict scrutiny analysis.<sup>10</sup> These recommendations have in many respects provided a roadmap of sorts for useful disparity studies and are therefore discussed in greater detail below.

## 2. The Fourth Circuit's Decision in H.B Rowe v. Tippet

Having the benefit of the Supreme Court's thinking in Croson and subsequent decisions like Adarand, the Fourth Circuit addressed the constitutionality of North Carolina's M/WBE statute governing state-funded transportation projects (N.C. Gen. Stat. § 136-28.4 (1990)) in H.B. Rowe Company, Inc. v. Tippet, 615 F.3d 233 (4th Cir. 2010).

The legal challenge in H.B Rowe was an outgrowth of an earlier state court challenge to the statute in Dickerson Carolina, Inc. v. Harrelson, 443 S.E.2d 127 (N.C. Ct. App. 1994, appeal dismissed, 448 S.E.2d

<sup>9</sup> Croson, 488 U.S. at 500.

<sup>10</sup> Six years after its decision in Croson, the Supreme Court was again confronted with an equal protection challenge to a Minority business program, in Adarand Constructors, Inc. v. Peña, 515 U.S. 200 (1995) (Adarand II). This time, however, a DBE program enacted by the federal government was at issue, thus implicating the Fifth Amendment rather than the Fourteenth Amendment analysis required for the local (state) program in Croson. The program was ultimately upheld by the Tenth Circuit on remand in Adarand Constructors, Inc. v. Slater, 228 F.3d 1147 (10<sup>th</sup> Cir. 2000) (Adarand III).

520 (N.C. 1994). The Dickerson case was deemed moot and dismissed because the state had suspended application of 136-28.4 in the face of the constitutional challenge, commissioning a disparity study to determine Minority utilization. Id. H.B. Rowe addressed the subsequent legal challenge to the amended statute.

Denied a contract because of its failure to demonstrate good faith efforts to meet participation goals for Minority and Women-owned subcontractors, H. B. Rowe Company, a prime contractor, brought suit asserting that the goals set forth in § 136-28.4 violated the Equal Protection Clause. After extensive discovery and a bench trial, the District Court upheld the challenged statutory scheme as constitutional both on its face and as applied.

The Fourth Circuit Court of Appeals affirmed, finding that the State produced a “strong basis in evidence” justifying the statutory scheme on its face and as applied to African American and Native American subcontractors, and that the State further demonstrated that the scheme was narrowly tailored to serve its compelling interest in remedying discrimination against those racial groups. The Court of Appeals did not, however, agree with the District Court that the same was true as applied to other Minority groups and Women-owned businesses.

Reviewing the results of the disparity study relied upon by the State, the Court observed that (1) the State’s use of a goals program for inclusion of African-American, Native-American, and Non-Minority Women-owned businesses was supported by a statistically strong basis, and that (2) the newly revised North Carolina statute which called for frequent goal setting was constitutional. The Court of Appeals focused prominently on the fact that the State’s program had been going on since 1983 and had only achieved the inclusion numbers adduced in the 2004 study performed by the commissioned national researcher.<sup>11</sup>

The importance of this case is that it solidified a trend that began in the other appellate courts of this country. When presented with a viable challenge to a state’s statute as it concerns M/WBE programs, the program not only must adhere to the requirements of Croson at inception, but also when the program’s continued viability is at issue.<sup>12</sup>

Such continuation must be well supported by more than just conjecture as to its necessity. There needs to be statistically sound collection of data from appropriate sources; testing of that data once collected to ensure high confidence; and anecdotal corroboration of findings to disprove other explanations for apparent disparities.<sup>13</sup> These matters are addressed at length below, which detailed analysis is intended to

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<sup>11</sup> H. B. Rowe, 615 F.3d 250.

<sup>12</sup> See generally, H.B. Rowe, 615 F.3d at 238-39, 247-48, 251-53.

<sup>13</sup> Id.

assist the City of Frederick evaluate its program, adjust it (if appropriate), and be properly positioned to defend it against a legal challenge.

As noted, decisions by the Fourth Circuit, like H.B. Rowe, are particularly important when addressing/evaluating the program implementation and administration by the City.

## IV. PURCHASING POLICIES, PRACTICES, AND PROCEDURES REVIEW

### A. Introduction

This chapter is designed to review the written policies and practices of the City of Frederick (the “City”) with respect to purchasing, contracting, and programs to enhance inclusion of Business Enterprises (DBEs), including but not limited to Minority and Women owned businesses. The Study will include analysis of the current DBE Program implemented and run by the City, which covers Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), and LGBTQ Enterprises – collectively referred to as MWBEs.

At present, the City does not have a race- or gender-based goals program or any other race- or gender-conscious procurement policy/initiative. Rather, the City expressly encourages inclusion of DBEs in City contracts or purchases and includes “good faith efforts” requirements in its written contracts.

Underlying this policy review is an understanding that written policies and practices may not always be consistently administered as there is often room for interpretation or discretionary implementation. Accordingly, policy interviews are intended to identify any deviations or differing interpretations of policies in order to determine whether there may be any effect on participation of small businesses, including those owned by Minorities and Women.

Review of the core documents and policy interviews conducted by GSPC with City personnel revealed that purchasing policies and processes are significantly centralized, centered in the Purchasing Department.

At the end of the present Disparity Study, specific findings about the City policies, practices, and procedures will be provided, and formal recommendations for improvement of the program and greater achievement of its goals given the findings.

### B. Document Review and Personnel Interviews

In preparation for the policy interviews, GSPC reviewed, among other materials:

- The current City of Frederick Purchasing Policies and Procedures Manual (11/2013)
- The City of Frederick Charter and Code of Ordinances<sup>14</sup>

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<sup>14</sup> Municipalities in the State of Maryland have independent, “home rule” powers. See, for example, Frederick Charter, Article IV, Section 1 (“Powers of the City”):

- Recent City Resolutions and Ordinance Amendments
- The City of Frederick governmental website, including Purchasing and Budgeting webpages
- Relevant Frederick County and State of Maryland Purchasing materials
- Other publicly available resources relating to City of Frederick purchasing

GSPC conducted policy interviews in early March 2020 with decisionmakers and officials regularly engaging in purchasing and contracting for Frederick. Included in these interviews were personnel in the Purchasing and Budgeting departments.

### C. Overview of City of Frederick Purchasing

The mission of the Purchasing Department is to receive the maximum value for the taxpayer's dollar by obtaining goods and services at the best possible price and quality. In addition, the department strives to provide the highest quality of service to all City staff; conduct all purchasing duties in accordance with all applicable Federal, State and Local laws; to develop mutually beneficial relationships with all vendors; and to ensure that all purchasing personnel conduct their duties with the highest degree of ethical behavior.<sup>15</sup>

Procurement with the City of Frederick is centralized in the Purchasing Department, with the Budget Director providing oversight. The November 2013 edition of the City of Frederick Purchasing Policies and Procedures Manual ("Policy Manual") continues to govern and guide procurement, and sets forth the responsibilities and functions of the Purchasing Department:

The Purchasing Department is responsible for administering the City of Frederick Purchasing Policies and Procedures as approved by the Mayor and Board of Aldermen; establishing and administering purchasing policies; dealing fairly with all potential sources of supply; obtaining goods and services in an efficient and businesslike manner; consolidating purchases of like or common items; obtaining fair prices for materials,

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The City has all the powers specified for exercise by municipalities or necessarily implied therefrom as granted under the Constitution and laws of the State of Maryland and of the United States of America, together with any and all powers inherent in the creation of municipalities, as fully and completely as though they were specifically enumerated in this Charter. In addition to all powers granted to the City by this Charter or any other provision of law, the City may exercise any power or perform any function that is not now or hereafter denied to it by the Constitution of Maryland, this Charter, or any applicable law passed by the General Assembly of Maryland. Absence of enumeration of powers and functions in this Charter shall not be deemed to limit the power and authority granted to the City by this section.

<sup>15</sup> City of Frederick Purchasing Policies and Procedures Manual (11/2013), p.5 ("Mission").

equipment, supplies and services; and generally determining how to effect cost saving and coordinate purchasing and contracting procedures for the City.

The primary function of the Purchasing Department is to purchase supplies, materials, equipment and services required by the City and to ensure that maximum value is achieved for each dollar spent.

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The Purchasing Department will work with the using department/division to prepare and assemble specifications and technical requirements which are to be substantially included in Invitations to Bid, Requests for Proposals, Requests for Expressions of Interest, and/or Requests for Qualifications.

The Purchasing Department will assist the using department/division in ascertaining the appropriate quality, quantity, and kind of materials requisitioned in order to serve the best interests of the City.

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All requests for goods and/or services and all purchases will be made through and by the Purchasing Department unless otherwise specified herein. (emphasis added)<sup>16</sup>

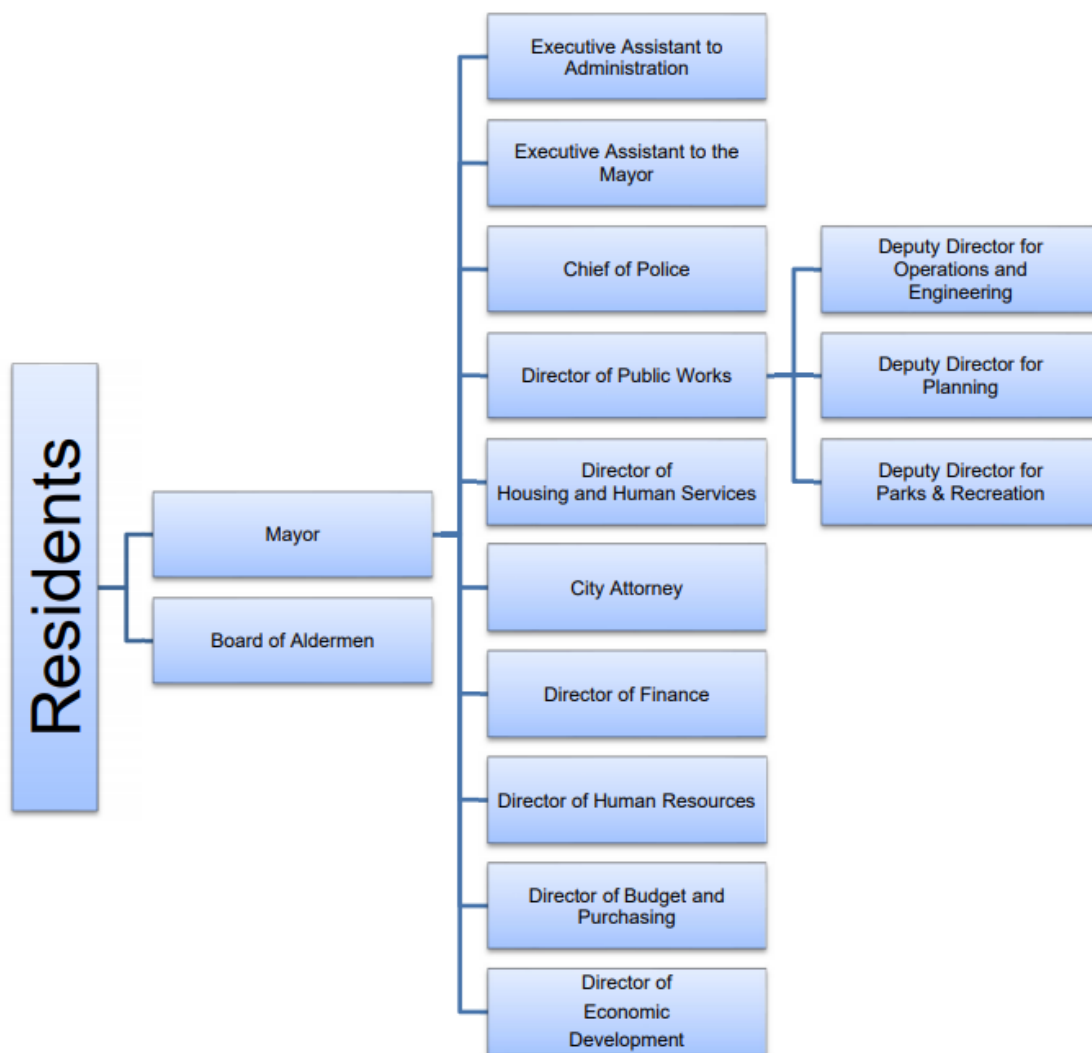
The Organizational Chart below shows the relationships between the Purchasing and Budgeting Departments, the using departments, and the greater City government structure.

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<sup>16</sup> Policy Manual, Section I(A)(2)-(3).



Figure 2: City of Frederick Organizational Chart



Source: The City of Frederick Annual Budget Report Fiscal Year July 1, 2020 – June 30, 2021

Of note, the Purchasing Manager has also been designated as the Liaison Officer for the City's Disadvantaged Business Enterprise Program (discussed in more detail below).<sup>17</sup>

Specific to MWBE considerations, the Purchasing Department is subject to the City's Minority Preference Policy, which provides: "Purchases of goods or services from bona fide Minority vendors will be made whenever possible, providing cost, quality and service are equal."<sup>18</sup>

With respect to contract thresholds, informal procurement methods can be used by the City for contracts and purchases less than \$50,000; contracts and purchases \$50,000 or more require use of the various formal procurement methods set forth in the Policy Manual.<sup>19</sup>

### 1. Informal Procurement

Informal procurement is used by the City for purchases of goods and non-professional services costing less than \$50,000.<sup>20</sup> Within informal procurement, there are additional thresholds or situations where the City – through the Purchasing Department (or Mayor) -- has discretionary options for purchases.

For example, where the price is less than \$10,000 the purchase can be made on "noncompetitive pricing" based on a requisition from a Department Head.<sup>21</sup> The City encourages vendor rotation for these smaller purchases ("It is the responsibility of all employees making purchases to rotate purchases among qualified vendors when repeated small purchases are made.").

Purchases between \$10,000 and \$49,999 require "competitive pricing," which means that three price quotes must be obtained through a Request for Quotation (RFQ).<sup>22</sup> In each of these informal purchasing scenarios, the ultimate decision is made by the Purchasing Manager (primarily), the Director of Budget and Purchasing, or the Mayor, mindful of "maximum value" for the City and "full and open competition" for vendors.<sup>23</sup>

<sup>17</sup> Policy Manual, p. 48 (Attachment 1).

<sup>18</sup> Policy Manual, Section III(B).

<sup>19</sup> Policy Manual, Section I(C); Section IV(A)-(C).

<sup>20</sup> Policy Manual, Section IV(A)-(C); Section I(C).

<sup>21</sup> Policy Manual, Section IV(C); Section V(A).

<sup>22</sup> Policy Manual, Section IV(B); Section V(A).

<sup>23</sup> Policy Manual, Section I(A)(C); Section II(A).

There are no MWBE goals (aspirational or otherwise), bid preferences, or other race-based or gender-based benefits in these procurement methods, but again, the Policy states that all other aspects being equal, the contract should go to an MWBE “whenever possible.”<sup>24</sup>

## **2. Formal Procurement**

For construction projects and purchases of goods and services costing more than \$50,000 competitive bidding, or formal procurement, is required.<sup>25</sup> Competitive bidding may take the form of an Invitation to Bid (ITB), a Request for Proposal (RFP), or a Request for Qualifications (RFQ).<sup>26</sup> Such contract awards must be approved by the Board of Aldermen.<sup>27</sup>

Bidding procedures for the various formal procurement methods (i.e., ITB, RFP, RFQ) are detailed in the Policy Manual, Section VI. The bid review committee overseeing the process is headed by the Purchasing Manager and includes staff members with experience in the field of the bid subject.<sup>28</sup>

Again, there are no MWBE goals (aspirational or otherwise), bid preferences, or other race-based or gender-based benefits in formal procurement. Consistent with the written policy, however, the contract should go to an MWBE whenever possible in the event all other factors in the bid are equal (e.g., price, quality and service).<sup>29</sup>

## **3. Exemptions**

Contracts that are not subject to the City’s informal and formal procurement procedures include Sole Source contracts, Piggybacking purchases, and Emergency Procurement.<sup>30</sup>

## **4. Qualifications-Based Procurement**

Contracts for Professional Services, including architecture, engineering, medicine, legal, finance, accounting, appraisal, and land surveying, are qualifications-based, and not subject to the competitive bidding rules.<sup>31</sup> Information is provided to the City through an RFQ or RFP, and negotiations are initiated with the top-ranked firm.<sup>32</sup> An award recommendation is then made to the Board of Aldermen, which makes

<sup>24</sup> Policy Manual, Section III(C).

<sup>25</sup> Policy Manual, Section IV(A).

<sup>26</sup> Id.

<sup>27</sup> Policy Manual, Section IV(A); Section II(C).

<sup>28</sup> Policy Manual, Section VI(A)(2).

<sup>29</sup> Policy Manual, Section III(C).

<sup>30</sup> Policy Manual, Section I(C)(1); Section IV(D); Section V(A),(P).

<sup>31</sup> Policy Manual, Section I(B), p. 12; Section IV(H); Section V(N).

<sup>32</sup> Policy Manual, Section V(N).

the final decision.<sup>33</sup> Interviews revealed that the City does not use “on-call” lists for Professional Services; an RFQ or RFP is always issued.

## 5. Job Order Contracting (JOC)

Job Order Contracting is permitted by the City, but only in the Construction context, allowing for “requirements contracts” for an indefinite quantity of construction services.<sup>34</sup>

## 6. Sole Source

Sole Source purchases are among the exceptions to the above-described procurement methods for goods and non-professional services, including purchases in excess of \$50,000.<sup>35</sup> When only one vendor is available to provide a needed good or service, competitive bidding is not required upon written justification by the Purchasing Manager. For purchases in excess of \$50,000, consent of the Budgeting Director is required before the Purchasing Manager can commence negotiations with the sole source vendor.<sup>36</sup> Use of Sole Source purchasing should not be used to subvert competition and is intended by the City to be strictly controlled and thoroughly documented.<sup>37</sup>

## 7. Cooperative Purchasing / Piggybacking

Piggybacking purchasing is another exception to the formal purchasing rules that govern contracts in excess of \$50,000.<sup>38</sup> “City procedure permits piggybacking off of contracts awarded by the State of Maryland, and contracts and awarded bids by local, and state government agencies and cooperative purchasing organizations[.]”<sup>39</sup>

Joint or cooperative purchases are likewise permitted without the need for competitive bidding.<sup>40</sup> The written policy cites the State of Maryland, the Frederick Area Cooperative Purchasing Committee, and several other entities or organizations as possible purchasing partners.<sup>41</sup> Interviews revealed that although the City is permitted to engage in joint purchasing, it is not used often, if at all. Piggybacking is more common.

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<sup>33</sup> Id.

<sup>34</sup> Policy Manual, Section I(B), page 11 (describing it as “a construction project delivery method”).

<sup>35</sup> Policy Manual, Section I(B), p. 14; Section I(C); Section IV(D); Section (V)(A).

<sup>36</sup> Id.

<sup>37</sup> Policy Manual, Section IV(D).

<sup>38</sup> Policy Manual, Section I(C); Section I(B), p. 12; Section III(A)(4).

<sup>39</sup> Policy Manual, Section I(B), page 12.

<sup>40</sup> Policy Manual, Section I(B), page 9; Section III(A)(4).

<sup>41</sup> Policy Manual, Section III(A)(4).

## 8. P-Cards

Procurement Cards, or “P-Cards,” are used by the City for smaller purchases. There are extensive procedures and regulations covering the use of P-Cards, but no express purchasing limits on them.<sup>42</sup> Interviews revealed that the City applies a \$500 limit on single purchases, a 10 purchases per day limit, and a 30-day limit of \$2,500 on P-Cards. These purchases are ultimately subject to approval by the Purchasing Manager or her staff.

The P-Cards are issued by J.P. Morgan, and interviewees were not aware of any MWBE tracking for P-Card purchases, either internally or through the issuer.

## 9. Blanket Purchasing Agreements

The City permits blanket purchasing for relatively small, recurring purchases such as office supplies and the like, and for recurring maintenance work.<sup>43</sup> “A blanket purchase order may be used as a release and encumbrance document to authorize the City to order on an as-needed basis a predetermined amount of supplies services, or construction work from an indefinite quantity contract.”<sup>44</sup> Such orders/contracts cannot exceed one year.<sup>45</sup>

## 10. Bundling and Unbundling

Because the City does not have a goals-based program, it does not use contract bundling or unbundling as a tool for increasing MWBE inclusion. That said, the Policy Manual does specifically address bundling/unbundling generally, which could present some opportunity for the City in that regard.<sup>46</sup>

## 11. Vendor Registration with the City

There are no prequalification lists with the City, and no registration is expressly required to bid on City projects or contracts. That said, the City’s recent transition to the ION WAVE software program and recent requirement for electronic submission of all bids effectively facilitates self-registration by bidders.<sup>47</sup> The

<sup>42</sup> Policy Manual, Section I(B), page 12; Section IV(K). Section IV(K)(5)(c) does indicate a single purchase limit and 30-day purchase limit apply, but the amount of such limitations is not provided.

<sup>43</sup> Policy Manual, Section I(B), page 8.

<sup>44</sup> Id.

<sup>45</sup> Policy Manual, Section I(B), page 9; Section III(A)(4).

<sup>46</sup> Policy Manual, Section I(A)(3) (“Like purchases shall be combined for bidding and quantity discount pricing.” “No contract, purchase, or group of requisitions shall be subdivided to avoid bid quotations requirements.”).

<sup>47</sup> Personnel interviews indicated some minor “growing pains” with the transition to electronic filing, but there were no complaints from business owners indicating that electronic filing created a barrier to participation.

City does not maintain a bidder's list, but a vendor's list is generated using successful bids. Notices of upcoming projects/contracts and bid opportunities are sent electronically using the vendor's list (utilizing commodity codes for targeted notification).

## **D. Bonding, Insurance, and Prompt Pay Issues**

### **1. Bonding and Insurance**

By written policy, bonds are not required for projects/contracts valued at \$20,000 or less.<sup>48</sup> Bonds are generally required for projects/contracts above that level – including performance bonds and payment bonds for subcontractors -- with the amount of the bond determined by the Legal Department in consultation with the Purchasing Manager.<sup>49</sup> GSPC understands from interviews that bid bonds are reportedly required for larger construction projects, but there is no specific written policy or guidance on that matter.

Insurance rates are set cooperatively between the Purchasing Department, Risk, Safety & Compliance Department, and the Legal Department. Typically, General Liability coverage limits of \$2 million (aggregate) and \$1 million per occurrence apply, subject to adjustments on a per-project basis.

Interviews with personnel indicated that bonding and insurance requirements have not been cited by vendors or potential bidders as barriers to participation, but there was some indication that worker's compensation rates could present a barrier for some smaller businesses.<sup>50</sup> Vendor input on these issues will be addressed in the Anecdotal Chapter of the Study.

### **2. Prompt Payment**

The Maryland prompt payment statutes provide that payment on a public contract must be made within 30 days of the date upon which payment becomes due, and subcontractors must be paid by prime contractors within 10 days of the prime contractor receiving their payment.<sup>51</sup> Personnel interviews revealed some confusion about the applicable law but that invoices are generally paid within 30 days of receipt by the City, and that there have been few complaints about prompt payment (limited to subcontractors on some large construction projects). Again, vendor input on these issues will be addressed in the Anecdotal Chapter of the Study.

<sup>48</sup> Policy Manual, Attachment 1. This was confirmed in personnel interviews.

<sup>49</sup> See Policy Manual, Section VI(B)(3), for example. This was also confirmed in interviews.

<sup>50</sup> The required limits are \$1 million pursuant to interviewees.

<sup>51</sup> Code of Maryland, State Finance & Procedure §§ 15-103; 15-226.

### **E. The Disadvantaged Business Enterprise Program**

The City of Frederick recognizes the importance and responsibility of awarding contracts to those businesses socially and/or economically disadvantaged and it is the policy of the City to utilize Disadvantaged Business Enterprises in all aspects of contracting.<sup>52</sup>

Policies and procedures governing the City's Disadvantaged Business Enterprise Program are promulgated and discussed in an attachment to the Policy Manual (Attachment 1). The DBE Program is not a goals-based or percentage-based preference program but encourages increased participation by small businesses owned by Minorities or Women.

The Program applies to projects subject to competitive bids (ITBs) and generally requires that bidders "shall make good faith efforts to subcontract a portion of the prime contract to small business concerns owned and controlled by socially and economically disadvantaged individuals (DBEs)[.]"<sup>53</sup> Like the federal DBE program, the City's Program presumes disadvantage for Women, African Americans, Hispanics, Native Americans, Asian-Pacific Americans, and Asian-Indian Americans.<sup>54</sup>

The firm preliminarily selected as the successful bidder on a City contract is required under the Program to provide information about the DBEs that will be used on the project/contract, or provide sufficient demonstration of good faith efforts to achieve participation.<sup>55</sup> This information is submitted by bidders on a DBE Participation Form, and they must also provide a City of Frederick Affirmative Action Data Form.<sup>56</sup> Bids that fail to meet these DBE requirements will be considered "nonresponsive."<sup>57</sup>

Interviews revealed that the City facilitates a DBE Committee which includes community members and other stakeholders, but no lawmakers or City personnel (though they are welcome to attend meetings). The DBE Committee is to hold monthly meetings. Anecdotal interviews conducted as part of this study may give insight about attendance at and perceived effectiveness of the DBE Committee, and will be addressed in that Chapter if significant.

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<sup>52</sup> Policy Manual, Attachment 1.

<sup>53</sup> Id.

<sup>54</sup> Id.

<sup>55</sup> Id.

<sup>56</sup> Id.

<sup>57</sup> Id.



In order to encourage participation and provide opportunities for DBEs, the City has instituted the following initiatives:

- Invite attendance and participation by Disadvantaged Business Enterprises (hereinafter “DBEs”) at “How to do Business with the City of Frederick” seminars
- Distribute “How to do Business with the City of Frederick” Brochure to DBEs
- Invite attendance and participation by DBEs at pre-bid meetings
- Advertise twenty (20) days, more or less, before bids or proposals are requested
- Provide written notice to DBEs that their interest in a proposed contract is solicited
- Maintain a list of DBEs to be contacted
- Provide DBEs with notice of all publicly advertised competitively bid contracts if the contract is within the specialty area of the DBE
- Provide DBEs with information on plans and specifications as provided to all bidders
- Offer assistance in obtaining bonding and insurance requirements, which shall include providing information to DBEs as to companies and/or businesses to provide bonding and insurance for DBEs
- Prepare annual report for the Mayor and Board of Alderman detailing the results of this Plan <sup>58</sup>

Under the Program, selection of a prime contractor “will be based on the determination of whether the competitor offering the lowest responsible bid also includes DBE(s) or has demonstrated that good faith efforts were attempted to include DBE(s).”<sup>59</sup> Once awarded, the contract agreement with the City will also require “that the prime contractor make every effort to include DBE(s) in the contract.”<sup>60</sup>

Should there be a determination by the City that a bidder has not acted in good faith with respect to the DBE Program, the contractor/bidder can be barred from further participation in City contracts, with reinstatement dependent on demonstration of certain “rehabilitative measures.”<sup>61</sup>

Finally, policy interviews revealed that MWBE utilization has not historically been tracked at any meaningful level, but the recent implementation of new procurement software (Ion Wave) in 2017 should assist in tracking on a going-forward basis.

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<sup>58</sup> Policy Manual, Attachment 1.

<sup>59</sup> Id.

<sup>60</sup> Id.

<sup>61</sup> Id.

### 1. Certification

To be eligible for the DBE Program a DBE firm must be certified. The City has its own certification process (done on a case-by-case basis), but also accepts MBE/DBE Certification from the State of Maryland.<sup>62</sup> Interviews revealed that the City tries to be over-inclusive with respect to certification, accepting certifications from various entities or agencies in addition to the State list. The City maintains a DBE Directory of eligible firms which is posted on its website and is available on request.

### 2. Good Faith Efforts

As noted, the DBE Program policies include the requirement for Good Faith Efforts at DBE inclusion.<sup>63</sup> Nowhere in the Policy Manual or related documents does the City list or enumerate what actions constitute Good Faith Efforts to achieve DBE participation, however, and interviews revealed that it is largely a matter of subjective evaluation by the Purchasing Manager. The DBE Participation Form, which is submitted by bidders and required for them to be considered “responsive,” prompts information regarding efforts to contact DBEs for possible quotes and to detail reasons for not using any DBEs -- or a particular DBE -- on the project/contract (e.g., the prime contractor is self-performing sub work; DBE bids were too high or not cost-effective).

Anecdotal interviews or other input from vendors and DBEs should give GSPC some insight into how the Good Faith Efforts process with the City is perceived.

### 3. Other Programs

There are other race- and gender-neutral programs and initiatives administered by the City (and the Purchasing Department). There is a Local Preference Policy, which is detailed below, a Buy America Policy, and an Environmentally Responsible Purchasing Policy.<sup>64</sup>

#### F. Local Preference Program

The City has established a Local Preference Program designed to ensure that it uses its spending power in a manner that benefits the local and state economy. Specifically, there are bid preferences provided to Local (“City” and “State”) businesses as part of the Policy, including a preference for a City business when its quote/bid is within 10% of the lowest quote or responsible bid, and a preference for a State business with a quote/bid within 5% of the lowest quote or responsible bid.<sup>65</sup>

<sup>62</sup> Policy Manual, Attachment 1; Section I(B), p. 10.

<sup>63</sup> Policy Manual, Attachment 1.

<sup>64</sup> Policy Manual, Sections III(C), (D), and (E).

<sup>65</sup> Policy Manual, Section III(C)(1), also setting a \$3,000 upper limit on a City Business preference and a \$1,500 limit on a State Business preference.

### G. Frederick Municipal Airport DBE Policy

The Frederick Municipal Airport, which is not a commercial airport, has also established a DBE Program pursuant to its receipt of Federal Aviation Authority (FAA) monies. The airport is administered through a private airport consultant, but the City's Purchasing Manager has been designated as the DBE Liaison Officer for the Program.

### H. Non-Discrimination Policy

In its Standard Terms & Conditions document, attached to City contracts, the City expressly states its non-discrimination policy:

DISCRIMINATION PROHIBITED: IN THE EXECUTION OF THE OBLIGATION AND RESPONSIBILITIES HEREUNDER, INCLUDING BUT NOT LIMITED TO HIRING OR EMPLOYMENT MADE POSSIBLE BY OR IN RELATION TO THIS CONTRACT, THE CONTRACTOR SHALL NOT DISCRIMINATE AGAINST PERSONS ON THE BASIS OF RACE, COLOR, RELIGION, SEX, NATIONAL ORIGIN, AGE, MARITAL STATUS, VETERAN STATUS, DISABILITY, SEXUAL ORIENTATION, GENDER IDENTITY, GENETIC INFORMATION, OR ANY OTHER LEGALLY PROTECTED GROUP IN EMPLOYMENT OR IN THE PROVISIONS OF SERVICES.

This is in accord with the policy of the State of Maryland. See Maryland State Finance and Procurement Code, Section 19-101 ("It is the policy of the State not to enter into any contract with any business entity that has discriminated in the solicitation, selection, hiring, or commercial treatment of vendors, suppliers, subcontractors, or commercial customers on the basis of race, color, religion, ancestry or national origin, sex, age, marital status, sexual orientation, or on the basis of disability or any otherwise unlawful use of characteristics regarding the vendor's, supplier's, or commercial customer's employees or owners.").

### I. Conclusion

City of Frederick procurement is significantly centralized and almost exclusively governed by the Purchasing Policy and Procedures Manual. The City does not have a goals-based DBE Program, but efforts at increased DBE inclusion appear from policy documents and staff interviews to be a focus of the Purchasing Department and City government generally. Purchasing leadership and staff appear to have detailed understanding of the relevant policies and procedures, but anecdotal interviews and related data may provide a clearer picture of how the Program is perceived.

An expanded legal analysis is contained in Appendix B.

## V. QUANTITATIVE ANALYSIS

The quantitative analysis measures and compares the availability of firms in each race/ethnicity/gender group within the City's geographical and product market areas to the utilization of each race/ethnicity/gender group, measured by the payments to these groups by the City.

The outcome of the comparison shows us whether there is a disparity between availability and utilization and whether that disparity is an overutilization, an underutilization, or in parity (the amount to be expected). Further, the disparity is tested to see if it is statistically significant. Finally, the regression analysis contained in the Chapter VI Private Sector Analysis will test other explanations for the disparity to determine if it is likely that the disparity is caused by race/ethnicity/gender status, or other factors. If there is statistically significant underutilization of MWBEs that is likely caused by race/ethnicity/gender, then GSPC will determine that there is a legal basis for an inference of discrimination.

Sections A through D address the methodologies employed for data collection, data assessment, database setup, and data clean-up. Section E focuses on establishment of the relevant market in which the City already does business. Section F estimates the pool of available firms which are deemed to be ready, willing and able to do business with the City. Section G lays out the City's contracting, or utilization history for the five (5) year Study Period, and examines utilization for MWBEs in Construction, A&E, Professional Services, Other Services, and Goods. Section H analyses the availability of MWBEs as compared to the City's utilization of such firms, to determine if there is a disparity. Section I determines whether the foregoing disparity suggests the presence of discrimination, and Section J provides a conclusion to the chapter.

### A. Data Assessment

The data assessment was initiated by a meeting with representatives from the Budget and Purchasing department. The purpose of this meeting was to determine what data City of Frederick maintains, in what format, and how GSPC could obtain the data. Further, the objective was for GSPC to get a better understanding of the City's purchasing process in order to best execute the methodology that has been approved by the City. It was also important for GSPC's team to understand how to operate the Study in a manner least intrusive to City personnel.

Following this assessment GSPC sent a data request which was prefixed with a review of GSPC's understanding of the data systems the City utilizes.

GSPC's Data Assessment Report is attached hereto as Appendix C .

## **B. Data Setup**

### **1. Electronic Data**

Electronic data (queried data tables and spreadsheets) supplied by the City and other data collected by GSPC were catalogued and stored in GSPC's computer systems subsequent to the data collection effort. The data entered were used to develop databases containing contracting history for each business type for prime contracting and sub-contracting done on behalf of the City.

### **2. Manual Data Entry**

Manual data entry was needed for filling in data gaps, for the assignment of Industry Categories for vendors without commodity codes, for entering bidder data, and entering subcontractor data.

## **C. Data Assignment, Clean-up, and Verification**

After the completion of data collection, the data was electronically and cleaned to find duplicates (both electronically and manually) and fill in unpopulated fields. The clean-up phase also included the following five (5) tasks:

1. Assigning and verifying ethnicity, race & gender of each firm;
2. Assigning each firm to one or more of the five (5) business categories based upon the kind of work that the firm performs;
3. Utilizing zip codes to determine certain areas to assign each firm's location;
4. Matching files electronically to pick up addresses, ethnicity/race/gender, and/or Industry Category; and
5. Filling in any additional missing data on firms.

File clean-up was first done electronically by linking information provided by the City to certain indicators, like commodity codes or cross-referencing information with other files to fill in missing fields. Additionally, rows with conflicting information regarding firm name, ethnicity, and zip code were electronically isolated and manually resolved.

### **1. Assignment of Race/Gender/Ethnicity**

In order to identify all other Minority groups, GSPC utilized the assignments given to firms in the governmental lists from the County of Frederick Minority Business Directory, Maryland Department of Transportation (MDOT) list, the Baltimore Certified list, and the DC DSLBD Certified list. Self-identified certifications were not considered. For vendors deriving from certified lists without an identifiable Minority group, they are included and placed in the "Unidentified MWBE" category. In assignment of race/gender/ethnicity, priority is given to race/ethnicity, so that all Minority owned firms were categorized

according to their race/ethnicity and not by gender. Women are categorized by race and gender. Firms with no race/ethnicity/gender indicated and Caucasian male owned firms are categorized as Non-Minority firms.

## **2. Assignment of Business Categories**

To assign Industry Categories to vendors, GSPC considered all commodity codes associated with a vendor from all vendor systems. This means a vendor can appear in multiple Industry Categories depending on the codes related to vendor from certified lists, internal records, as well as the manually assigned codes relating to the City's spending.

Generally, (a) the Construction category includes those firms that perform construction services; (b) the Architecture & Engineering category includes only architecture and engineering firms; (c) the Professional Services category includes lawyers, doctors, accountants, banks, and other highly skilled and licensed services; (d) the Other Services category includes services such as janitorial, landscape, and cleaning services; and (e) the Goods category includes firms who provide a tangible product.

## **3. Contract Classifications**

Firms were identified and classified into the following five (5) Industry Categories:

- Construction - "the process of building, altering, repairing, improving, or demolishing any public structure or building, or other public improvements of any kind to any public real property. It does not include the routine operation, routine repair or routine maintenance of existing structures, buildings or real property."
- Architecture & Engineering (A&E) - "includes design services, architectural and engineering services."
- Professional Services - "i.e., legal services, fiscal agent, financial advisor or advisory services, educational consultant services, and similar services by professional persons or groups of high ethical standards"
- Other Services - "the furnishing of labor, time, or effort by a contractor, not involving the delivery of a specific end product other than reports that are merely incidental to the required performance. This term does not include employment agreements or collective bargaining agreements." (not including Construction, Professional Services or other Professional Services)
- Goods & Supplies - "all property, excluding real property or an interest in real property, including but not limited to supplies, equipment, and materials."

## D. Data Source Description

The following describes the databases created by GSPC and used for the analyses contained in this Study:

### 1. Master Award File and Master Payment File

The Master Award File contains all formal prime contractor awards of \$50,000 or more made during the Study Period. No data system for awards less than the formal threshold was maintained by the City.

The Master Payment File contains all payments made during the Study Period. There was no lower or upper limit for dollars paid in any analysis involving payments.

Award and Payment dollars can be excluded for being a non-competitive award to a not-for-profit, a utility expense, a lease agreement, an award within/between governmental entities, or an award made to a vendor outside of the country with no location in the United States.

The grand total of formal awards for FY 2014-2018 was \$117,536,848.02. Of this amount, \$116,732,721.62 (99.32%) was included and \$804,126.49 (0.68%) was excluded. The grand total of payments for FY 2014-2018 was \$566,887,826.00. Of that amount, \$228,945,720.30 (40.39%) was included in the study and \$337,942,105.70 (59.61%) was excluded.

### 2. Master Subcontractor Award File

The Master Subcontractor Award file is all subcontractor awards made during the Study period. The City had tracked subcontractors from FY 14-17, but not FY 18. However, the Airport did track their subcontractors in that year.

Both the City and Airport subcontractor data was combined and used in the Total Utilization analysis.

### 3. City of Frederick Data Files

- Prime Formal Awards (Within Study Period)
- Prime Payments (Within Study Period)
- City of Frederick Subcontractor Awards (FY 14-17)
- Airport Subcontractor Awards (FY 15-18)
- Innoprise Vendors (Current)
- IonWave Supplier List (Current)
- City of Frederick Bidders (FY 18)



#### 4. Outside Files

- County of Frederick Minority Business Directory (Current)
- DC Certified List (Current)
- Maryland DOT List (Current)
- Baltimore Certified Minority List (Current)

#### E. Relevant Market Analysis

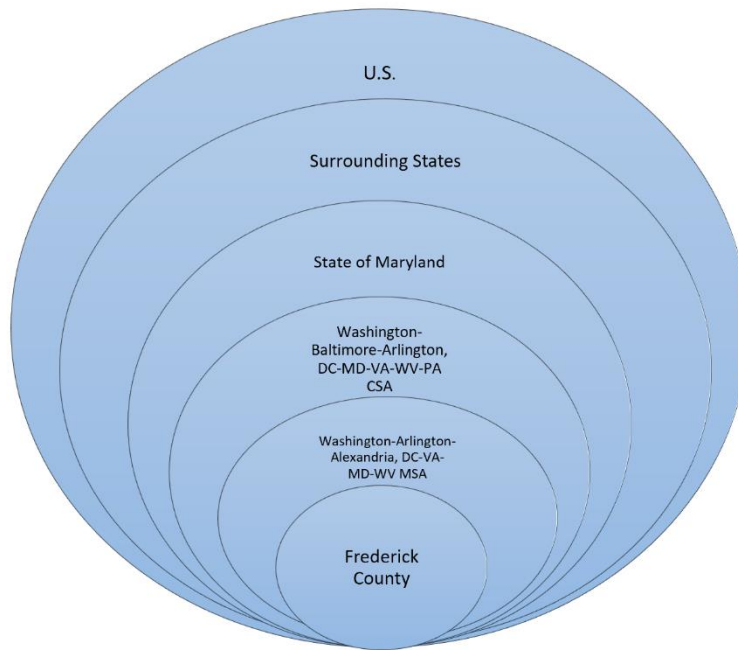
The now commonly held benchmark that the relevant market area should encompass at least 75% to 85% of the "qualified" vendors that serve a particular sector has its origins in antitrust lawsuits. In line with antitrust precepts, United States Supreme Court Justice Sandra Day O'Connor in *Croson*, specifically criticized Richmond, Virginia, for making Minority Business Enterprises (MBEs) all over the country eligible to participate in its set-aside programs. The Court reasoned that a mere statistical disparity between the overall Minority population in Richmond, Virginia, which was 50% African American, and the award of prime contracts to Minority owned firms, 0.67% of which were African American owned firms, was an insufficient statistical comparison to raise an inference of discrimination. Justice O'Connor also wrote that the relevant statistical comparison is one between the percentage of Minority Business Enterprises in the marketplace [or Relevant Market] who were qualified to perform contracting work (including prime contractors and subcontractors) and the percentage of total City contracting dollars awarded to Minority firms. It should be noted that it is preferable, from an economic standpoint, to evaluate the largest and most exhaustive group of firms, even to 100% of all firms, but for this Study, GSPC utilized a benchmark of at least 75%.

The relevant market has been determined for each of the major procurement categories:

- Construction
- Architecture & Engineering (A&E)
- Professional Services
- Other Services
- Goods & Supplies

For each procurement category, GSPC measured the "relevant market" by the area where at least 75% of the type's dollars were awarded during the Study Period.

The figure below, summarizes the geographic area where at least 75% of prime awardees are located in each industry. In analyzing the relevant market data, GSPC tabulated the percentage of dollars awarded, beginning with Frederick County (by zip codes). GSPC continued counting in radius surrounding Frederick County until the cumulative percentage was equal to or greater than 75%.

*Figure 3: Relevant Market*

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If, after counting where dollars were awarded during the Study Period, the percentage of dollars paid to firms within Frederick County, MD was not at least 75% of all dollars awarded, then GSPC calculated the percentages in the Washington-Arlington-Alexandria, DC-VA-MD-WV MSA (but not including the zip codes in Frederick County that had already been counted). The counties in the MSA are Frederick County, Fairfax County, Prince George's, District of Columbia, Prince William County, Loudoun County, Arlington County, Charles County, City of Alexandria, Stafford County, Spotsylvania County, Calvert County, Fauquier County, Jefferson County, Culpeper County, City of Manassas, Warren County, City of Fredericksburg, City of Fairfax, City of Manassas Park, Clarke County, City of Falls Church, Madison County, Rappahannock County, and Montgomery County. If the 75% benchmark was still not met, then GSPC counted the dollars spent in the counties in the Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA. The counties in the CSA are Baltimore County, Baltimore City, Anne Arundel County, Howard County, Harford County, Carroll County, Queen Anne's County, Washington County, Berkeley County, Morgan County, Franklin County, Frederick County (Virginia), City of Winchester, Hampshire County, St. Mary's County, and Talbot County.

If dollars awarded to firms doing business with the City that are located within the CSA did not reach the 75% benchmark, then GSPC began counting dollars going to firms located in the State of Maryland. If dollars awarded to firms still did not reach the 75% benchmark, GSPC went to all states adjacent to Maryland.

Excluding Architecture & Engineering, the 75% benchmark was reached for all procurement categories within the CSA. In Architecture & Engineering, the benchmark was reached in the MSA. For the period analyzed, GSPC determined that the CSA should be used for the Study.

The tables below detail the formal award dollars (contracts \$50,000 and over) in each level of the Geographic Relevant Market calculations by Total Award Amount. Only regions that have awards appear in the tables.

*Table 6: Geographical Relevant Market – Construction*  
(Using Formal Award Dollars FY2014-FY2018)  
City of Frederick Disparity Study

Relevant Market Region	Award Amount	Percent	Cumulative Percent
Frederick County	\$4,297,467.01	4.26%	4.26%
MSA	\$63,712,097.48	63.19%	67.45%
CSA	\$8,176,634.85	8.11%	75.56%
PA	\$19,819,421.00	19.66%	95.21%
USA	\$4,826,615.00	4.79%	100.00%

Griffin & Strong, P.C. 2021

*Table 7: Geographical Relevant Market - Architecture & Engineering*

(Using Formal Award Dollars FY2014-FY2018)  
City of Frederick Disparity Study

Relevant Market Region	Award Amount	Percent	Cumulative Percent
Frederick County	\$260,986.00	8.01%	8.01%
MSA	\$2,486,765.19	76.36%	84.37%
CSA	\$508,917.00	15.63%	100.00%

Griffin & Strong, P.C. 2021

*Table 8: Geographical Relevant Market – Professional Services*

(Using Formal Award Dollars FY2014-FY2018)  
City of Frederick Disparity Study

Relevant Market Region	Award Amount	Percent	Cumulative Percent
Frederick County	\$1,728,045.26	25.14%	25.14%
MSA	\$280,800.00	4.09%	29.23%
CSA	\$4,714,707.00	68.59%	97.82%
USA	\$150,000.00	2.18%	100.00%

Griffin & Strong, P.C. 2021

*Table 9:Geographical Relevant Market – Other Services*

(Using Formal Award Dollars FY2014-FY2018)  
City of Frederick Disparity Study

Relevant Market Region	Award Amount	Percent	Cumulative Percent
Frederick County	\$1,919,701.87	41.58%	41.58%
MSA	\$499,728.20	10.82%	52.40%
CSA	\$1,521,529.55	32.95%	85.35%
PA	\$60,000.00	1.30%	86.65%
USA	\$616,475.00	13.35%	100.00%

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*Table 10:Geographical Relevant Market – Goods & Supplies*

(Using Formal Award Dollars FY2014-FY2018)  
City of Frederick Disparity Study

Relevant Market Region	Award Amount	Percent	Cumulative Percent
Frederick County	\$249,961.00	21.68%	21.68%
CSA	\$834,950.21	72.43%	94.11%
PA	\$67,920.00	5.89%	100.00%

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## F. Availability Analysis

### 1. Methodology

The methodology utilized to determine the availability of businesses for public contracting is crucial to understanding whether a disparity exists within the relevant market. Availability is a benchmark to examine whether there are any disparities between the utilization of MWBEs and their availability in the marketplace.

Croson and subsequent decisions give only general guidance as to how to measure availability. One common theme from the court decisions is that being qualified to perform work for a local jurisdiction is one of the key indices of an available firm. In addition, the firm must have demonstrated that it is both willing and able to perform the work.

The measures of availability utilized in this Study incorporate all the criteria of availability required by Croson:

- The firm does business within an industry group from which City of Frederick makes certain purchases.
- The firm's owner has taken steps to do business with the City of Frederick and qualified itself to do such business by registering or certifying itself.
- The firm is located within a relevant geographical area such that it can do business with the City of Frederick.

The following definitions are necessary for the estimation of availability:

Definitions: Let: Firm (Business Name, Ethnicity, Industry Category, County, State) A = Availability Estimates A (Asian) = Availability Estimates for Asian American Business Enterprises N (Asian) = Number of Asian American Business Enterprises in the relevant market N (MWBE) = Number of Minority owned Business Enterprises N (t) = Total number of businesses in the pool of bidders in the procurement category (for example, Construction) Availability, (A), is a percentage and is computed by dividing the number of firms in each MWBE group by the total number of businesses in the pool of bidders for that procurement category, N (t). For instance, availability for Asian American Business Enterprises is given by  $A(\text{Asian}) = N(\text{Asian})/N(t)$  and total availability for all MWBE groups is given by  $A(\text{MWBE}) = N(\text{MWBE})/N(t)$ . Once these availability estimates were calculated, GSPC compared them to the percentage of firms utilized in the respective business categories in order to generate the disparity indices which will be discussed later in this analysis.

### 2. Measurement Basis for Availability

There are numerous approaches to measuring available, qualified firms. GSPC has established a methodology of measuring availability based upon demonstrated interest in doing business with governments. In determining whether a firm is ready, willing, and able, it cannot be presumed that simply

because a firm is doing business in a relevant market, it desires, or is capable of, working for the City, particularly as a prime contractor, which may require a particular capacity. However, a determination of availability for subcontractors, where all levels of work are available, (to be made strictly based upon the existing vendor base of the City assumes that there are no discriminatory barriers associated with registration or certification. GSPC measured Prime Contractor Availability by utilizing the Master Vendor File (the contents of which is set forth below) but including only those firms that have bid, been pre-qualified, or performed as prime contractors (sources for prime contractors indicated by an (\*). In determining those firms to be included in the subcontractor availability pool, GSPC included the entire “Master Vendor File.”

1. City's Awarded Prime Vendors (Study Period) \*
2. City's Awarded Subcontractor Vendors (Study Period)
3. City's Payment System Vendors (Current) \*
4. City's Bidders (FY 18)
5. IonWave Supplier List (Current)
6. County of Frederick Minority List (Current)
7. DC Certified List (Current)

### 3. Capacity

The ability or capacity to perform the work is tested below in the Threshold Analysis (Appendix D). It is also tested in the Regression Analysis conducted in Chapter VI below.

First, capacity is important to determine whether a separate availability estimate for prime contractors and subcontractors is needed. GSPC performs a threshold analysis of the level of contracting done by prime contractors to determine if it is reasonable to believe that the firms in the marketplace that have at least registered to do business with governments and that are included in our availability lists, have the capacity to perform as prime contractors, or only as subcontractors. The threshold analysis shows the tier of awards at each level and across all race/ethnicity/gender groups.

Secondly, from the Survey of Business Owners, GSPC determined whether the level of contracting awarded to MWBEs outside of contracting with City of Frederick indicates similar levels of contracting to those attained in City awards. If not, that could indicate a level of unutilized capacity of MWBEs within the City's contracting.

Finally, the regression analysis shows whether race/ethnicity/gender factors are impediments overall to the success of MWBEs in obtaining awards in the City of Frederick marketplace and whether, but for those factors, firms would have the capacity to provide goods and services on a level higher than what is presently being utilized.



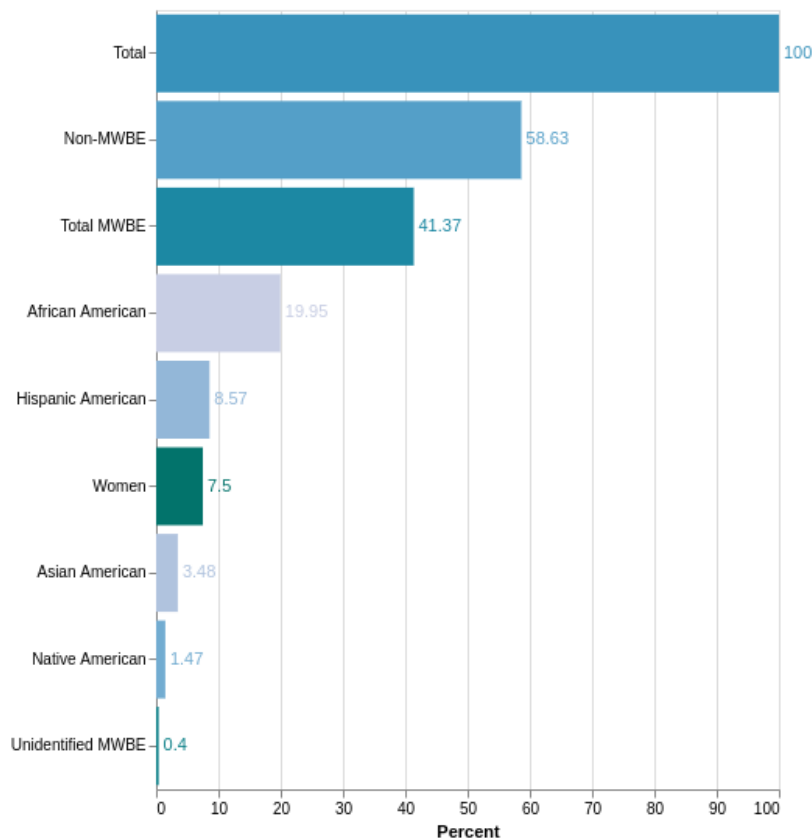
#### 4. Availability Estimates

Below are the Availability Estimates for the Study. The data are separated into the five (5) major business categories: Construction, A&E, Professional Services, Other Services, and Goods. The figures below show the number of firms by race/gender/ethnicity as compared with the total number of firms. It is important to note that a firm can appear in multiple Industry Categories based on the commodity codes in the original vendor data sources, as well as categorization done at the award level. If there were no commodity codes for a vendor that is within the relevant market, GSPC manually assigned a single Industry Category to them.

The relevant market for Construction is the surrounding CSA. Within this region, 41.37% of available firms are MWBE and can perform work in the Construction Industry Category.

*Table 11: Availability Estimates - Construction*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

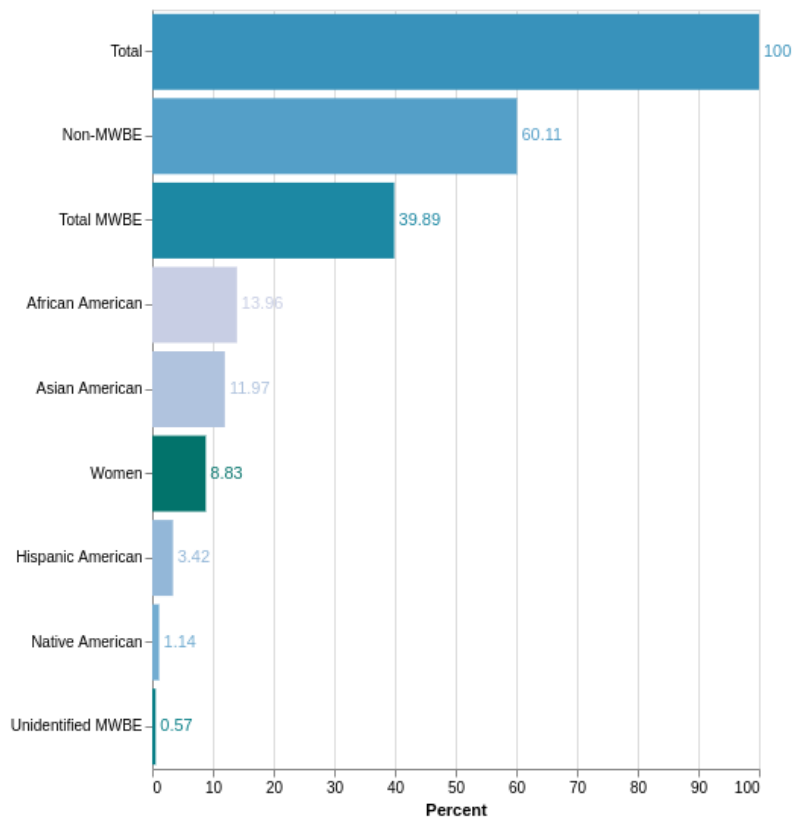


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The relevant market for Architecture & Engineering is the surrounding CSA. Within this region, 39.89% of available firms are MWBE.

*Table 12: Availability Estimates – Architecture & Engineering*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

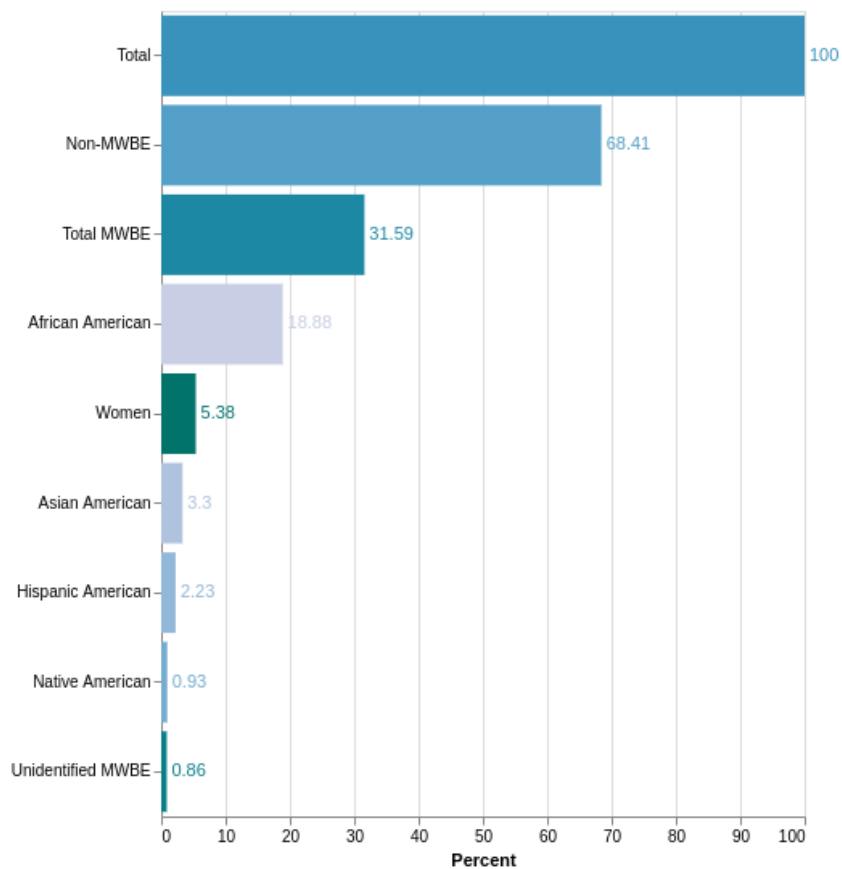


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The relevant market for Professional Services is the surrounding CSA. Within this region, 31.59% of firms are MWBE.

*Table 13: Availability Estimates – Professional Services*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

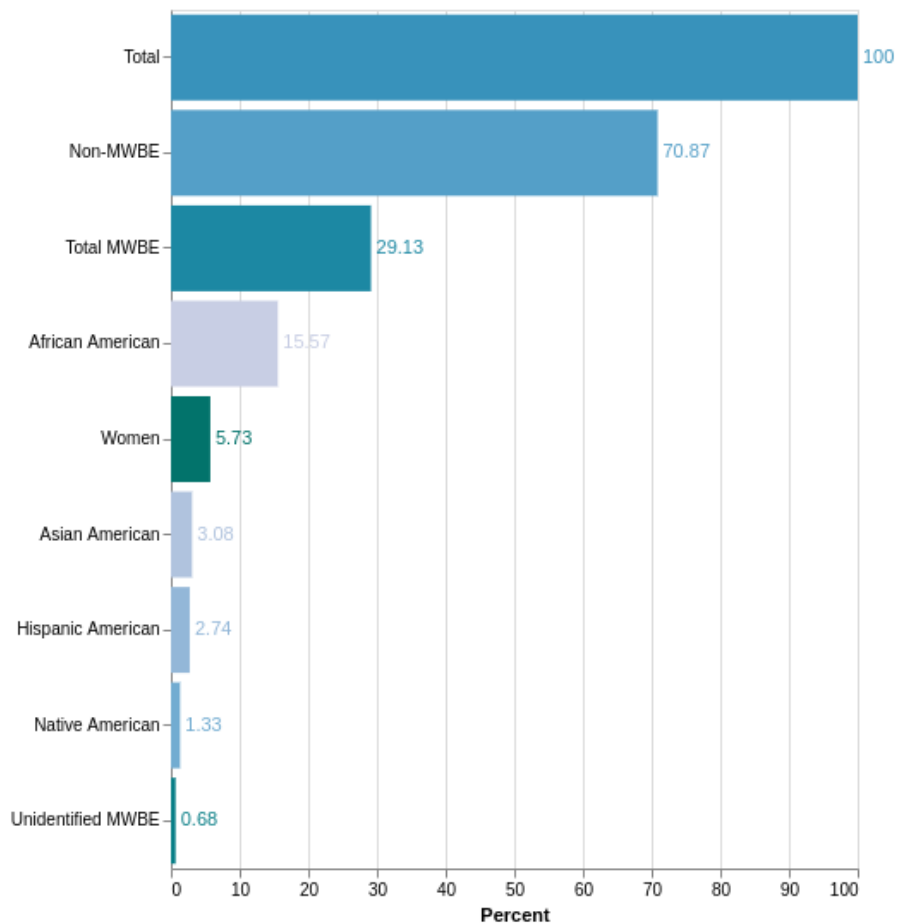


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The relevant market for Other Services is the surrounding CSA. Within this region, 29.13% of firms are MWBE.

*Table 14: Availability Estimates – Other Services*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

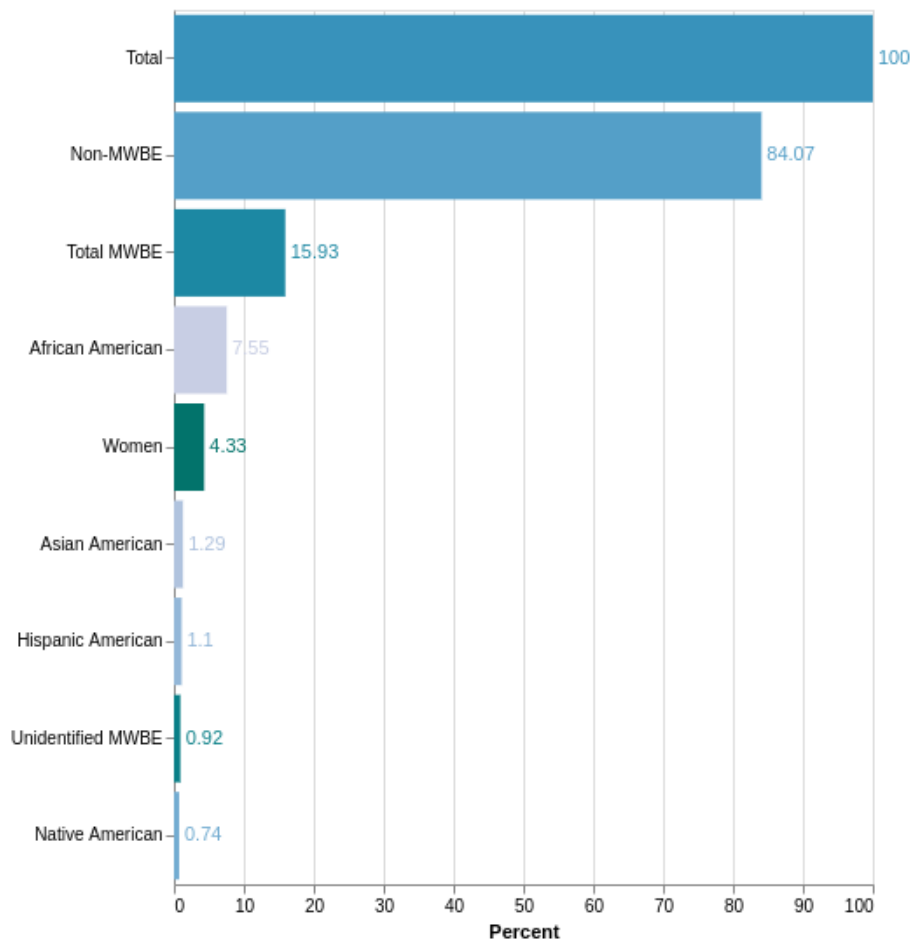


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The relevant market for Goods & Supplies is the surrounding CSA. Within this region, 15.93% of firms are MWBE.

*Table 15: Availability Estimates – Goods & Supplies*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study



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## G. Utilization Analysis

### 1. Prime Utilization

The relevant award history for the City has been recorded based upon the award databases provided by the City for formal awards of Fifty Thousand (\$50,000) and above.<sup>66</sup> In the Prime Utilization tables below, the dollars and percentage of dollars awarded in each of the five (5) major procurement categories have been broken out by race/ethnicity/gender for each year of the Study Period. Additionally, the tables include the number of awards and percent of awards. The total of each race/ethnicity/gender group represented in the MWBE category will, when added to the Non-MWBE Category, equal the Total Column.

Only certified firms whose closest found location is within the relevant market are considered for the utilization analysis. In Construction, the overall Prime MWBE utilization for the study period was 29.01% of dollars. The largest awarded construction vendor in the study period was a Non-Minority construction firm who was awarded 49.86% of all construction dollars. In Architecture & Engineering, the overall Prime MWBE utilization for the study period was 15.59% of dollars. In Professional Services, the overall Prime MWBE utilization for the study period was 0.00%. In Other Services, the overall Prime MWBE utilization for the study period was 7.01% of dollars. In Goods & Supplies, the overall Prime MWBE utilization for the study period was 0.00% of dollars.

Table 16: Prime Utilization - Construction

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Asian American	\$0.00	0.00%	\$0.00	0.00%	\$22,103,239.40	73.91%	\$0.00	0.00%	\$0.00	0.00%	\$22,103,239.40	29.01%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MBE	\$0.00	0.00%	\$0.00	0.00%	\$22,103,239.40	73.91%	\$0.00	0.00%	\$0.00	0.00%	\$22,103,239.40	29.01%
Women	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MWBE	\$0.00	0.00%	\$0.00	0.00%	\$22,103,239.40	73.91%	\$0.00	0.00%	\$0.00	0.00%	\$22,103,239.40	29.01%
Non-MWBE	\$39,289,228.10	100.00%	\$420,340.00	100.00%	\$7,802,676.45	26.09%	\$716,810.54	100.00%	\$5,853,904.85	100.00%	\$54,082,959.94	70.99%
Total	\$39,289,228.10	100.00%	\$420,340.00	100.00%	\$29,905,915.85	100.00%	\$716,810.54	100.00%	\$5,853,904.85	100.00%	\$76,186,199.34	100.00%

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<sup>66</sup> GSPC also conducted an analysis of utilization and analysis of all payments, which included all awards under \$50,000, in Appendix E.

*Table 17: Prime Utilization – Architecture & Engineering*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Asian American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MBE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Women	\$0.00	0.00%	\$246,784.00	14.11%	\$0.00	0.00%	\$260,986.00	34.17%	\$0.00	0.00%	\$507,770.00	15.59%
Total MWBE	\$0.00	0.00%	\$246,784.00	14.11%	\$0.00	0.00%	\$260,986.00	34.17%	\$0.00	0.00%	\$507,770.00	15.59%
Non-MWBE	\$0.00	0.00%	\$1,502,656.00	85.89%	\$294,626.19	100.00%	\$502,894.00	65.83%	\$448,722.00	100.00%	\$2,748,898.19	84.41%
Total	\$0.00	0.00%	\$1,749,440.00	100.00%	\$294,626.19	100.00%	\$763,880.00	100.00%	\$448,722.00	100.00%	\$3,256,668.19	100.00%

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*Table 18: Prime Utilization-Professional Services*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Asian American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MBE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Women	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MWBE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Non-MWBE	\$2,201,957.00	100.00%	\$1,413,045.26	100.00%	\$698,350.00	100.00%	\$2,310,000.00	100.00%	\$100,200.00	100.00%	\$6,723,552.26	100.00%
Total	\$2,201,957.00	100.00%	\$1,413,045.26	100.00%	\$698,350.00	100.00%	\$2,310,000.00	100.00%	\$100,200.00	100.00%	\$6,723,552.26	100.00%

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Table 19: Prime Utilization – Other Services

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0.00	0.00%	\$0.00	0.00%	\$64,970.00	3.50%	\$0.00	0.00%	\$126,811.00	23.48%	\$191,781.00	4.87%
Asian American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$84,583.00	15.66%	\$84,583.00	2.15%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MBE	\$0.00	0.00%	\$0.00	0.00%	\$64,970.00	3.50%	\$0.00	0.00%	\$211,394.00	39.14%	\$276,364.00	7.01%
Women	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MWBE	\$0.00	0.00%	\$0.00	0.00%	\$64,970.00	3.50%	\$0.00	0.00%	\$211,394.00	39.14%	\$276,364.00	7.01%
Non-MWBE	\$238,722.00	100.00%	\$1,250,121.55	100.00%	\$1,793,310.27	96.50%	\$53,800.00	100.00%	\$328,641.80	60.86%	\$3,664,595.62	92.99%
Total	\$238,722.00	100.00%	\$1,250,121.55	100.00%	\$1,858,280.27	100.00%	\$53,800.00	100.00%	\$540,035.80	100.00%	\$3,940,959.62	100.00%

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*Table 20: Prime Utilization– Goods & Supplies*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Asian American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MBE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Women	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MWBE	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Non-MWBE	\$538,161.00	100.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$546,750.21	100.00%	\$1,084,911.21	100.00%
Total	\$538,161.00	100.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$546,750.21	100.00%	\$1,084,911.21	100.00%

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## 2. Total Utilization (Prime and Subcontractor Awards)

The City only tracks subcontracting dollars on MWSBE firms. This data is not stored in a single data system. The full set of all subcontracting data GSPC obtained was not all subcontracting dollars on all projects. Because this data does not represent a comprehensive view of all subcontracting dollars, GSPC conducted a total utilization analysis by combining prime contract dollars with subcontract dollars, after subtracting subcontract dollars from prime contract dollars on a contract-by-contract basis.

The final subcontractor data set had Primes Contractors in every Industry Category but Goods & Supplies, hence no analysis was performed in this category.

In Construction, the Total MWBE utilization for the study period was 30.61% of dollars with Asian American firms composing 28.72%.

*Table 21: Total Utilization - Construction*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$330,000.00	0.84%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$330,000.00	0.43%
Asian American	\$519,000.00	1.32%	\$0.00	0.00%	\$21,360,239.40	71.42%	\$0.00	0.00%	\$0.00	0.00%	\$21,879,239.40	28.72%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$53,009.50	0.18%	\$29,060.00	4.05%	\$0.00	0.00%	\$82,069.50	0.11%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$201,000.00	0.67%	\$0.00	0.00%	\$0.00	0.00%	\$201,000.00	0.26%
Total MBE	\$849,000.00	2.16%	\$0.00	0.00%	\$21,614,248.90	72.27%	\$29,060.00	4.05%	\$0.00	0.00%	\$22,492,308.90	29.52%
Women	\$445,600.00	1.13%	\$0.00	0.00%	\$382,285.12	1.28%	\$0.00	0.00%	\$0.00	0.00%	\$827,885.12	1.09%
Total MWBE	\$1,294,600.00	3.30%	\$0.00	0.00%	\$21,996,534.02	73.55%	\$29,060.00	4.05%	\$0.00	0.00%	\$23,320,194.02	30.61%
Non-MWBE	\$37,994,628.10	96.70%	\$420,340.00	100.00%	\$7,909,381.83	26.45%	\$687,750.54	95.95%	\$5,853,904.85	100.00%	\$52,866,005.32	69.39%
Total	\$39,289,228.10	100.00%	\$420,340.00	100.00%	\$29,905,915.85	100.00%	\$716,810.54	100.00%	\$5,853,904.85	100.00%	\$76,186,199.34	100.00%

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In Architecture & Engineering, the Total MWBE utilization for the study period was 27.80% with Women owned firms composing 21.94%.

*Table 22: Total Utilization – Architecture & Engineering*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Asian American	\$0.00	0.00%	\$166,864.00	9.54%	\$0.00	0.00%	\$23,979.00	3.14%	\$0.00	0.00%	\$190,843.00	5.86%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MBE	\$0.00	0.00%	\$166,864.00	9.54%	\$0.00	0.00%	\$23,979.00	3.14%	\$0.00	0.00%	\$190,843.00	5.86%
Women	\$0.00	0.00%	\$453,648.00	25.93%	\$0.00	0.00%	\$260,986.00	34.17%	\$0.00	0.00%	\$714,634.00	21.94%
Total MWBE	\$0.00	0.00%	\$620,512.00	35.47%	\$0.00	0.00%	\$284,965.00	37.30%	\$0.00	0.00%	\$905,477.00	27.80%
Non-MWBE	\$0.00	0.00%	\$1,128,928.00	64.53%	\$294,626.19	100.00%	\$478,915.00	62.70%	\$448,722.00	100.00%	\$2,351,191.19	72.20%
Total	\$0.00	0.00%	\$1,749,440.00	100.00%	\$294,626.19	100.00%	\$763,880.00	100.00%	\$448,722.00	100.00%	\$3,256,668.19	100.00%

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In Professional Services, the Total MWBE utilization for the study period was 2.99%

*Table 23: Total Utilization - Professional Services*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0.00	0.00%	\$0.00	0.00%	\$5,900.00	0.84%	\$8,804.00	0.38%	\$0.00	0.00%	\$14,704.00	0.22%
Asian American	\$0.00	0.00%	\$16,965.00	1.20%	\$104,170.00	14.92%	\$52,272.00	2.26%	\$12,920.00	12.89%	\$186,327.00	2.77%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MBE	\$0.00	0.00%	\$16,965.00	1.20%	\$110,070.00	15.76%	\$61,076.00	2.64%	\$12,920.00	12.89%	\$201,031.00	2.99%
Women	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MWBE	\$0.00	0.00%	\$16,965.00	1.20%	\$110,070.00	15.76%	\$61,076.00	2.64%	\$12,920.00	12.89%	\$201,031.00	2.99%
Non-MWBE	\$2,201,957.00	100.00%	\$1,396,080.26	98.80%	\$588,280.00	84.24%	\$2,248,924.00	97.36%	\$87,280.00	87.11%	\$6,522,521.26	97.01%
Total	\$2,201,957.00	100.00%	\$1,413,045.26	100.00%	\$698,350.00	100.00%	\$2,310,000.00	100.00%	\$100,200.00	100.00%	\$6,723,552.26	100.00%

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In Other Services, the Total MWBE utilization for the study period was 7.01% of dollars.

*Table 24: Total Utilization - Other Services*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	2014		2015		2016		2017		2018		Study Period	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0.00	0.00%	\$0.00	0.00%	\$64,970.00	3.50%	\$0.00	0.00%	\$126,811.00	23.48%	\$191,781.00	4.87%
Asian American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Hispanic American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$84,583.00	15.66%	\$84,583.00	2.15%
Native American	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MBE	\$0.00	0.00%	\$0.00	0.00%	\$64,970.00	3.50%	\$0.00	0.00%	\$211,394.00	39.14%	\$276,364.00	7.01%
Women	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%	\$0.00	0.00%
Total MWBE	\$0.00	0.00%	\$0.00	0.00%	\$64,970.00	3.50%	\$0.00	0.00%	\$211,394.00	39.14%	\$276,364.00	7.01%
Non-MWBE	\$238,722.00	100.00%	\$1,250,121.55	100.00%	\$1,793,310.27	96.50%	\$53,800.00	100.00%	\$328,641.80	60.86%	\$3,664,595.62	92.99%
Total	\$238,722.00	100.00%	\$1,250,121.55	100.00%	\$1,858,280.27	100.00%	\$53,800.00	100.00%	\$540,035.80	100.00%	\$3,940,959.62	100.00%

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## H. Determination of Disparity

This section of the report addresses the crucial question of whether, and to what extent, there is disparity between the utilization of MBEs/WBEs as measured against their availability in the City of Frederick marketplace.

### 1. Methodology

The statistical approach to answer this question is to assess the existence and extent of disparity by comparing the MWBE utilization percentages (by dollars) to the percentage of the total pool of MWBE firms in the relevant geographic and product areas. The actual disparity derived as a result of employing this approach is measured by use of a Disparity Index (DI).

The Disparity Index is defined as the ratio of the percentage of MWBE firms utilized (U) divided by the percentage of such firms available in the marketplace, (A): Let: U =Utilization percentage for the MWBE group A =Availability percentage for the MWBE group  $DI = \text{Disparity Index for the MWBE group } DI = U/A$

The results obtained by a disparity analysis will result in one of three conclusions: overutilization, underutilization or parity. Underutilization is when the Disparity Index is below one. Overutilization is when the Disparity Index is over one. Parity, or the absence of disparity is when the Disparity Index is one (1.00) which indicates that the utilization percentage equals the availability percentage. In situations where there is availability, but no utilization, the corresponding Disparity Index will be zero. Finally, in cases where there is neither utilization nor availability, the corresponding Disparity Index is undefined and designated by a dash (-) symbol. Disparity analyses are presented separately for each procurement category and for each race/gender/ethnicity group. They are also disaggregated by year, for each year of the Study Period.

### 2. Summary of Prime Disparity Indices

The table below consolidates the Disparity Index tables, isolating only the index for the full study period. A statistically significant underutilization is indicated by a p-value less than 0.5. The phrase “Small Numbers” indicates that there is not enough evidence to accept or reject the null hypothesis.

In Construction, there was a statistically significant underutilization of Prime MWBE firms during the study period. Asian American firms were overutilized by an index of 8.31, the largest index in the study.

In Architecture & Engineering, there was a statistically significant underutilization of Prime MBE firms during the study period. There was an overutilization of Women owned firms.

In Professional Services, there was a statistically significant underutilization of Prime MWBE firms during the study period.

In Other Services, there was a statistically significant underutilization of Prime MWBE. The statistical significance of the underutilization of Hispanic firms were too small to determine.

In Goods & Supplies, there was a statistically significant underutilization of Prime MWBE firms.

In all categories, Prime Non-Minority firms were overutilized with a disparity percentage of 10% or greater.

*Table 25: Summary of Disparity Indices (Prime)*

Based on Award Utilization Disparity Indices for Study Period (FY 2014 – 2018)  
City of Frederick Disparity Study

Race/Ethnicity	Construction	Architecture & Engineering	Professional Services	Other Services	Goods & Supplies
African American	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.31 <sup>a</sup>	0.0 <sup>a</sup>
Asian American	8.31 <sup>c</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>
Hispanic American	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.78 <sup>b</sup>	0.0 <sup>a</sup>
Native American	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>
Total MBE	0.86 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.31 <sup>a</sup>	0.0 <sup>a</sup>
Women	0.0 <sup>a</sup>	1.76 <sup>c</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>
Total MWBE	0.7 <sup>a</sup>	0.39 <sup>a</sup>	0.0 <sup>a</sup>	0.24 <sup>a</sup>	0.0 <sup>a</sup>
Non-MWBE	1.21 <sup>c</sup>	1.41 <sup>c</sup>	1.46 <sup>c</sup>	1.31 <sup>c</sup>	1.19 <sup>c</sup>

#### Legend

Significant Disparity (Disparity Percentage Below 80%)

<sup>a</sup> Statistically Significant Underutilization (Confidence interval of 95% and probability error of less than 5%)

Disparity (Disparity Percentage 80% to 99.9%)

<sup>b</sup>Very small number to produce statistical significance

Overutilized (Disparity Percentage over 100%)

<sup>c</sup> Overutilized and Disparity Percentage of 100% or greater.

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Details of the Disparity Indices can be found in Appendix F.

### **3. Summary of Prime and Subcontractor Disparity Indices**

In Construction, there was a statistically significant underutilization of Prime and Subcontractor MWBE firms during the study period. Asian American firms were overutilized by an index of 8.23.

In Architecture & Engineering, there was a statistically significant underutilization of Prime and Subcontractor MBE firms. There was an overutilization of Women owned firms.

In Professional Services, there was a statistically significant underutilization of Prime and Subcontractor MWBE firms during the study period. However, the underutilization of Asian American firms was not statistically significant.

In Other Services, there was a statistically significant underutilization of Prime and Subcontractor MWBE firms. The statistical significance of the underutilization of Hispanic firms were too small determine.

In Goods & Supplies, there were no prime contractor awards with subcontractors tracked by the City.

In all categories with tracked subcontractors, Non-Minority firms were overutilized with a disparity percentage greater than 10%.

*Table 26: Summary of Disparity Indices (Prime and Subcontractor)*

Based on Total Award Utilization Disparity Indices for Study Period (FY 2014 – 2018)  
City of Frederick Disparity Study

Race/Ethnicity	Construction	Architecture & Engineering	Professional Services	Other Services
African American	0.02 <sup>a</sup>	0.0 <sup>a</sup>	0.01 <sup>a</sup>	0.31 <sup>a</sup>
Asian American	8.23 <sup>c</sup>	0.49 <sup>a</sup>	0.84	0.0 <sup>a</sup>
Hispanic American	0.01 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.78 <sup>b</sup>
Native American	0.18 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>
Total MBE	0.88 <sup>a</sup>	0.19 <sup>a</sup>	0.12 <sup>a</sup>	0.31 <sup>a</sup>
Women	0.14 <sup>a</sup>	2.48 <sup>c</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>
Total MWBE	0.74 <sup>a</sup>	0.7 <sup>a</sup>	0.09 <sup>a</sup>	0.24 <sup>a</sup>
Non-MWBE	1.19 <sup>c</sup>	1.2 <sup>c</sup>	1.42 <sup>c</sup>	1.31 <sup>c</sup>

#### Legend

Significant Disparity (Disparity Percentage Below 80%)

Disparity (Disparity Percentage 80% to 99.9%)

Overutilized (Disparity Percentage over 100%)

<sup>a</sup> Statistically Significant Underutilization (Confidence interval of 95% and probability error of less than 5%)

<sup>b</sup> Very small number to produce statistical significance

<sup>c</sup> Overutilized and Disparity Percentage of 100% or greater.

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### I. Determining the Significance of Disparity Indices

The determination that a particular ethnic or gender group has been overutilized or underutilized is not, standing alone, proof of discrimination. Typically, the determination of whether a disparity is “statistically significant” can be based on the depth of the disparity in that any Disparity Index that is less than .80 is considered to be a statistically significant underutilization and any Disparity Index over 1.10 is considered to be a statistically significant overutilization. The disparity indices impact as designated in the above tables

as “overutilization”, “underutilization”, or “parity” have been colored to indicate such statistically significant impact.

Typically, the determination of whether a disparity is “substantially significant” can be based on any Disparity Index that is less than .80. Further, GSPC uses a statistical test that considers whether or not the typical Disparity Index across all vendor categories is equal to unity. This constitutes a null hypothesis of “parity” and the test estimates the probability that the typical Disparity Index departs from unity, and the magnitude of the calculated test statistic indicates whether there is typically underutilization or overrepresentation. Statistical significance tests were performed for each Disparity Index derived for each MBE/WBE group, and in each procurement category. This approach to statistical significance is consistent with the case law and the Transportation Research Board approach to statistical significance in disparity studies.

The existence of a statistically significant disparity between the availability and utilization of Minority or women owned businesses that is determined to likely be the result of the owners’ race, gender, or ethnicity will impact the recommendations provided as a result of this study. GSPC will, in such a case, make recommendations for appropriate and narrowly-tailored race/ethnicity/gender-neutral remedies for this discrimination to give all firms equal access to public contracting with the City. GSPC will also, if appropriate, recommend narrowly-tailored race/ethnicity/gender-conscious remedies. If no statistically significant disparity is found to exist or if such a disparity is not determined to be a likely result of firm owners’ race, ethnicity, or gender on their success in the marketplace, GSPC may still make recommendations to support the continuation of engagement, outreach, small business development, and non-discrimination policies in the procurement processes of City of Frederick.

## J. Conclusion

Generally, every MWBE group was underutilized in each category in total throughout the Study Period as prime contractors and in total utilization. The cases where there was an overutilization for an MWBE group in prime contractors and total utilization were created by a disproportionately large awards to a single firm.

## VI. ANALYSIS OF MARKETPLACE CONTRACTING DISPARITIES IN THE FREDERICK MARKET AREA

### A. Introduction

In this section GSPC considers the market entry, private sector, public contracting and subcontracting outcomes, and other relevant market experiences of Minority and Women owned firms relative to Non-MWBE firms in the Frederick Market Area<sup>67</sup>. Our analysis utilizes data from businesses that are willing, able, or have actually contracted/subcontracted in the Frederick Market Area, with the aim of determining if the likelihood of successful contracting/subcontracting opportunities—actual and perceived—in the Frederick Market Area is conditioned, in a statistically significant manner, on the race, ethnicity, or gender status of firm owners. Such an analysis is a useful and important compliment to estimating simple disparity indices, which assume all things important for success and failure are equal among businesses competing for public contracts. This analysis is based on unconditional moments, that is, statistics that do not necessarily inform causality or the source of differences across such statistics. As simple disparity indices do not condition on possible confounders<sup>68</sup> of new firm entry, and success and failure in public sector contracting/subcontracting by businesses, they are only suggestive of disparate treatment, and their implied likelihood of success/failure could be biased. Further details on this statistical analysis is provided in Appendix G.

Our analysis posits that there are possible confounders of success and failure in the entry of new firms in the market and public sector contracting/subcontracting that are sources of heterogeneity, or diverse characteristics among businesses that lead to differences in success and failure. Failure to condition on the sources of heterogeneity in success/failure in new firm formation and public sector contracting/subcontracting outcomes can leave simple disparity indices devoid of substantive policy implications as they ignore the extent to which firm owner race/ethnicity characteristics are causal factors. Disparate outcomes could possibly reflect in whole or in part, outcomes driven by disparate business firm characteristics that matter fundamentally for success/failure in the formation of new firms and public sector contracting/subcontracting outcomes. If the race, ethnicity, or gender status of a firm owner conditions lower likelihoods of success/failure, this would be suggestive of these salient and mostly immutable characteristics causing the observed disparities.

A broad context for considering disparities by firm ownership status can be informed by considering private sector outcomes in the relevant Frederick Market Area. In general, the success and failure of MWBEs in public contracting could be conditioned by their outcomes in the private sector regarding their revenue generating capacity. The value of a descriptive private sector analysis is that it situates disparity analyses in

<sup>67</sup> Washington-Arlington-Alexandria Metropolitan Statistical Area (“MSA”) from the US Census Bureau.

<sup>68</sup> A confounder can be defined as a variable that, when added to the regression model, changes the estimate of the association between the main independent variable of interest (exposure) and the dependent variable (outcome) by 10% or more.

the "but-for" justification. Ian Ayres and Frederick Vars (1998), in their consideration of the constitutionality of public affirmative programs posit a scenario in which private suppliers of financing systematically exclude or charge higher prices to Minority businesses, which potentially increases the cost of which Minority owned businesses can provide services required under public contracts relative to Non-Minority owned businesses.<sup>69</sup> This private discrimination means that MWBEs may only have recourse to higher cost financing due to facing discrimination in private sector capital markets, which compromises the competitiveness of their bids. Such a perspective on discrimination suggests that barriers faced by MWBEs in the private sector can rationalize targeted contracting programs by political jurisdictions, as the counterfactual is that in the absence of such private sector discrimination, they would be able to compete with other firms in bidding for public contracts.

### B. Firm Revenue

Table 27 below reports on firm ownership type and revenue for the Washington-Arlington-Alexandria Metropolitan area from the US Census Bureau's 2017 Annual Business Survey (ABS).<sup>70</sup> GSPC's descriptive private sector analysis considers the percentage of representation in the population of firms and revenue across the available and relevant firm ownership type classifications. Measuring at the firm level, business ownership is defined as having more than 50% of the stock or equity in the business and is categorized by sex, ethnicity, race, veteran status, and publicly held and other firms not classifiable by sex, ethnicity, race, and veteran status.

For the Frederick Market Area, Table 27 reveals that relative to Caucasian owned firms, the revenue shares of each Minority owned firm never exceed .03% (Asian).<sup>71</sup> In every instance MWBEs have revenue shares far smaller than their firm representation shares. Relative to firms owned by Caucasians in the Frederick Market Area, exclusive of Women owned firms—some of whom are Caucasian—the MBE revenue shares are of a large order of magnitude below their firm representation shares. This is consistent with and

<sup>69</sup> See: Ayres, Ian, and Fredrick E. Vars. 1998, "When does private discrimination justify public affirmative action?" *Columbia Law Review*, 98: 1577-1641.

<sup>70</sup> ABS data are publicly available at <https://www.census.gov/programs-surveys/abs/data.htm>. The ABS provides information on selected economic and demographic characteristics for businesses and business owners by sex, ethnicity, race, and veteran status. Further, the survey measures research and development (for microbusinesses), new business topics such as innovation and technology, as well as other business characteristics. The ABS is conducted jointly by the U.S. Census Bureau and the National Center for Science and Engineering Statistics within the National Science Foundation. It replaces the five-year Survey of Business Owners for employer businesses, the Annual Survey of Entrepreneurs, the Business R&D and Innovation for Microbusinesses survey, and the innovation section of the Business R&D and Innovation Survey.

<sup>71</sup> The percentages do not "add-up" to one, as the Women ownership category is not "mutually exclusive" of the other race/ethnicity/gender categories.



suggestive of, but not necessarily causal evidence for MWBEs facing discriminatory barriers in the private sector of the Frederick Market Area.<sup>72</sup>

*Table 27: Firm Ownership Type and Revenue Characteristics*

**For City of Frederick Market Area:  
2017 Annual Business Survey**

Ownership Structure	Number of Firms	Percentage of all Firms (approximate )	Market Area Total Revenue (\$1,000)	Percentage of Market Area Total Revenue (approximate)	Ratio of Firm Share to Revenue Share (approximate)
All	213,139	100	\$810,419,553	100	1.0
Women	24,548	.221	\$37,939,484	.047	4.70
Caucasian	75,163	.678	\$213,495,835	.263	2.58
Black American	6,980	.063	\$11,696,894	.014	4.50
American Indian	451	.004	\$699,072	.001	4.0
Asian	19,717	.178	\$29,818,533	.037	4.81
Native Hawaiian	Suppressed <sup>a</sup>	Suppressed <sup>a</sup>	Suppressed <sup>a</sup>	Suppressed <sup>a</sup>	Suppressed <sup>a</sup>
Hispanic	6,783	.061	\$9,563,458	.012	5.08
Publicly Held and not classifiable by race, gender, ethnicity	8,602	.078	\$554,302,964	.684	.114

*Source:* US Census Bureau 2017 Annual Business Survey. <sup>a</sup>Value suppressed to preserve confidentiality as a result of very few firms or there are one or two large firms that dominate the statistic.

Given that publicly held firms are not usually classifiable by race/ethnicity/gender status, and account for a disproportionate share of revenues, a simple comparison of an MWBE firm and revenue share may not inform the existence of any private sector disparities with precision. In this context, the ratio of an MWBE firm share to revenue share may be more informative of disparities.<sup>73</sup> For example, in the case of firms owned by Hispanics, this ratio is (.061)/(.012) or approximately 5.08, suggesting that the revenue share of firms owned by Hispanics would have to increase by a factor of approximately 5 to achieve firm share parity

<sup>72</sup> This can be ascertained by simply computing the ratio of each MWBEs firm share to total revenue share. For example, in the case of firms owned by Black-Americans, this ratio is approximately 13.33, in contrast to approximately 3.65 for firms owned by Caucasians. In this context, relative to firms owned by Caucasians, firms owned by Black-Americans are far more “revenue underrepresented” with respect to their firm share.

<sup>73</sup> This ratio can be viewed as an index of underrepresentation, as it measures the distance between a firm’s representation in the market relative to its share of market revenue. A value greater than unity indicates underrepresentation, a value equal to unity indicates parity, and a value less than unity indicates overrepresentation.

in the Frederick Market Area. For firms owned by Caucasians this ratio is approximately 2.58. Thus, relative to Caucasian owned firms, those owned by Hispanics are revenue underrepresented in the Frederick Market Area by a factor of approximately  $5.08/2.58 = 1.97$  or 197%. In general, all firms owned by non-Caucasians in the Frederick Market Area are revenue underrepresented relative to Caucasian owned firms.

Overall, the descriptive summary in Table 27 suggests that in the Frederick Market Area private sector, MWBEs face barriers that translate into lower firm revenues. In general, if being an MWBE in the Frederick Market Area private sector is associated with lower firm revenue, absolutely and relative to their firm share in the market, this lends some support to the “but-for” justification for affirmative action in public procurement. Lower revenues for MWBEs in the Frederick Market Area is suggestive, but does not necessarily prove, the existence of private discrimination that undermines their capacity to compete with Non-MWBEs for public contracting opportunities. This could motivate a private discrimination justification for Affirmative Action in City procurement policies, otherwise the is potentially a passive participant in private discrimination against MWBEs with respect to its procurement practices.

### C. Self-Employment

The Concrete Works decision upholding an MWBE program was based in part on evidence that “Black Americans, Hispanics, and Native Americans working in Construction have lower rates of self-employment than similarly situated Caucasians.”<sup>74</sup>

To explicitly examine potential disparities in the rates of business ownership in the Frederick Market Area, GSPC estimated the parameters of a Logit regression model using 2019 American Community Survey (ACS) data from the Integrated Public Use Microdata Series (IPUMS) housed at the University of Minnesota.<sup>75</sup> The ACS is a project of the U.S. Census Bureau that has replaced the decennial census as the key source of information about American population and housing characteristics. The 2018 ACS is an approximately 1-in-100 weighted public use sample consisting of U.S. households with the smallest identifiable unit being the Public Use Microdata Unit (PUMA), which is a geography containing at least 100,000 individuals. The specification of each model controls for those variables customary in the literature that are utilized to explain self-employment, so as to estimate the effects of MWBE status on self-employment while minimizing and/or eliminating confounding factors.<sup>76</sup> GSPC determines statistical significance on the basis of the estimated coefficient’s probability value—or P-value. The P-value is the probability of obtaining an estimate of the coefficient by chance alone, assuming that the null hypothesis of the variable having a zero

<sup>72</sup> *Concrete Works v. City and County of Denver*, 321 F.3 950 (10th Cir 2003).

<sup>75</sup> ACS data are publicly available at <https://usa.ipums.org/usa/>. See: *Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas and Matthew Sobek. IPUMS USA: Version 10.0 [dataset]. Minneapolis, MN: IPUMS, 2020.* <https://doi.org/10.18128/Do10.V10.0>

<sup>76</sup> See: Grilo, Isabel, and Roy Thurik. 2008. “Determinants of Entrepreneurial Engagement Levels in Europe and the US.” *Industrial and Corporate Change* 17: pp. 1113-1145, and Van der Sluis, Justin, Mirjam Van Praag, and Wim Vijverberg. 2008. “Education and Entrepreneurship Selection and Performance: A Review of the Empirical Literature.” *Journal of economic surveys* 22: pp. 795-841.

effect is true. As a convention, GSPC rejects the null hypothesis of no effect, and concludes the estimated coefficient is statistically significant as long as  $P\text{-value} \leq .10$ , which we highlight in bold in the tables for all parameter estimates.

Our ACS data define the Frederick Market Area as the Washington-Arlington-Alexandria MSA. In particular, we selected the ACS sample on the basis of the MET2013 variable, which identifies MSAs using the 2013 definitions for MSA from the U.S. Office of Management and Budget (OMB). An MSA is a region consisting of a large urban core together with surrounding communities that have a high degree of economic and social integration with the urban core.

In the GSPC Logit regression model of self-employment, the estimated parameters are odds ratios, and when greater (or less) than unity indicate that having a particular characteristics increases (or decreases) the likelihood of being self-employed. In the case of the MWBE status indicators (e.g. Black American, Woman), the excluded category is Caucasian Males, and a positive (or negative) odds ratio indicates that relative to Caucasian Males, having that MWBE characteristic increases (or decreases) the likelihood of being self-employed in the Frederick Market Area. The MWBE status indicator are of primary interest, as they inform the extent to which MWBE status is a driver of disparities in outcomes. The other covariates serve as controls for firm capacity.

Table 28 reports parameter estimates across all business sectors in the Frederick Market Area. The estimated odds ratios less than unity with statistical significance suggest that relative to Caucasian Males, firms owned by Black Americans, Native Americans, and Pacific Islanders, are less likely to be self-employed in the Frederick Market Area. This is suggestive of these firms facing barriers to self-employment in the Frederick Market Area. The lower likelihood of these Minority owned firms in the Frederick Market Area could reflect disparities in public contracting as Chatterji, Chay, and Fairlie (2014) find that the self-employment rate of Black Americans is increasing with respect to the provisioning and establishment of MWBE public procurement programs.<sup>77</sup>

Table 29 reports parameter estimates for Construction in the Frederick Market Area—an important sector in the market for public procurement. The estimated odds ratios less than unity with statistical significance suggest that relative to Caucasian Males, firms owned by Women, Black Americans, Native Americans, and Pacific Islanders, are less likely to be self-employed in the Frederick Market Area construction sector. This is suggestive of these firms facing barriers to self-employment in the Frederick Market Area construction sector. The lower likelihood of some MWBEs being self-employed in the construction sector in the Frederick Market Area could reflect disparities in public contracting, as Marion (2009) finds that the self-employment

<sup>77</sup> Chatterji, Aaron K., Kenneth Y. Chay, and Robert W. Fairlie. 2014. "The Impact of City Contracting Set-asides on Black Self-employment and Employment." *Journal of Labor Economics* 32: pp. 507-561.

rate of Black Americans in construction is increasing with respect to the provisioning and establishment of MWBE public construction procurement programs.<sup>78</sup>

*Table 28: Self-Employment/Business Ownership in Frederick Market Area:*

*Logit Parameter Odds Ratio Estimates From The 2019 American Community Survey*

	<b>Coefficient</b>	<b>Standard Error</b>	<b>P-value</b>
<i>Regressand:</i> Self Employment in The Frederick Market Area			
<i>Regressors:</i>			
Constant	.0142	.0021	<b>.0000</b>
Age	1.13	.0018	<b>.0000</b>
Age-Squared	.9471	.0932	.1348
Married	1.23	.0182	<b>.0274</b>
Woman	.8435	.0731	.1384
Black American	.9472	.0246	<b>.0175</b>
Hispanic	.9831	.0914	.1635
Native American	.7813	.0362	<b>.0000</b>
Pacific Islander American	.8712	.1373	<b>.0462</b>
Asian American	.9814	.0746	.1361
Other Race American	.9318	.1473	.1327
College Degree	1.15	.0374	<b>.0374</b>
Speaks English Only	.9735	.0317	<b>.0165</b>
Disabled	.9172	.0938	<b>.0426</b>
Value of Home (\$)	1.13	.0041	<b>.0000</b>
Interest, Dividend, and Rental Income (\$)	1.12	.0012	<b>.0000</b>
Mortgage Payment (\$)	.9581	.0016	.1375
Number of Observations	52,428		
<i>Pseudo-R<sup>2</sup></i>	.173		

Bold approximate P-value indicates statistical significance level of .05 or lower.

*Source of Data:* American Community Survey 2019, IPUMs USA

<sup>78</sup> Marion, Justin. 2009. "Firm Racial Segregation and Affirmative Action in the Highway Construction Industry." *Small Business Economics* 33: Article 441.

*Table 29: Construction Sector Self-Employment/Business Ownership in Frederick Market Area:  
Logit Parameter Odds Ratio Estimates From The 2019 American Community Survey*

	Coefficient	Standard Error	P-value
<i>Regressand: Self Employment in Frederick Market</i>			
<i>Regressors:</i>			
Constant	.0173	.0018	<b>.0000</b>
Age	1.17	.0012	<b>.0000</b>
Age-Squared	.9635	.0932	.0261
Married	1.18	.0135	<b>.0416</b>
Woman	.8136	.0163	<b>.0273</b>
Black American	.9135	.0374	<b>.0284</b>
Hispanic	.9318	.0735	.1273
Native American	.9417	.0641	<b>.0261</b>
Pacific Islander American	.9174	.1253	<b>.0217</b>
Asian American	.9471	.0362	.1255
Other Race American	.9653	.1582	.1638
College Degree	1.12	.0261	<b>.0173</b>
Speaks English Only	.9416	.0184	<b>.0183</b>
Disabled	.9412	.0426	<b>.0371</b>
Value of Home (\$)	1.16	.0024	<b>.0000</b>
Interest, Dividend, and Rental Income (\$)	1.14	.0013	<b>.0000</b>
Mortgage Payment (\$)	.9374	.0012	.1451
Number of Observations	49,754		
<i>Pseudo-R<sup>2</sup></i>	.193		

Bold approximate P-value indicates statistical significance level of .05 or lower.

*Source of Data:* American Community Survey 2019, IPUMs USA

#### D. Building Permit Analysis

To enable a closer look at the extent of MWBE participation in the market economy of the City of Frederick proper, Table 30 reports on the distribution of building permits by identifiable firm type in the City of Frederick for the 2014–2018 fiscal years.<sup>79</sup> While building permits are directly related to the construction industry, construction activities engender spending on other economic activities. As such, an analysis of the distribution of building permits by firm type can inform the extent to which MWBEs are participating in the market economy of a given political jurisdiction such as the City of Frederick.

The results in Table 30 suggest that MWBE participation in the City of Frederick economy is essentially nonexistent. The total MWBE share of City of Frederick building permits for the time period under consideration was approximately 1%. The negligible MWBE share is also dominated by Hispanic owned enterprises, as the share of firms owned by African American, Asian Americans, and Women were individually less than one one hundredth of one percent. This suggests that in the City of Frederick, MWBEs face barriers in participating in the local market economy.

*Table 30: Distribution of Building Permits*

In Frederick Market Area  
Fiscal Years 2014 - 2018

Race/Ethnicity/Gender	Number of Building Permits	Percent of
African American	1	.0001
Asian American	1	.0001
Hispanic	86	.0115
Native American	0	.0000
<b>Total Minority Business Enterprise (MBE)</b>	88	.0118
Women	3	.0004
<b>Total Minority &amp; Women Business</b>	91	.0122
<b>Total Non-MWBE</b>	7,356	.9878
<b>Total</b>	7,447	1.000

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#### E. Bank Loan Denials

To the extent that Small, Minority, Women, and Disadvantaged firms (SMWBEs) are credit-constrained as a result of facing discrimination in private lending markets, their capacity to compete for and execute public project could be compromised. In this context, a political jurisdiction that awards public contracts is potentially a passive participant in discrimination as SMWBEs may only have recourse to higher cost

<sup>79</sup> A total of 38,872 building permit observations were excluded due either missing individual/business names or being outside of the fiscal years under consideration.

financing due to facing discrimination in private credit markets, which compromises the competitiveness of their bids. Such a perspective on discrimination suggests that barriers faced by SMWBEs in the private sector credit markets can rationalize targeted public contracting programs by political jurisdictions, and the capacity and growth of SMWBEs could be enhanced with access to public contracting opportunities (Bates, 2009).<sup>80</sup>

To determine if SMWBEs face barriers in the private credit market, Tables 31 - 32 report, for each of the distinct SMWBEs and owner self-reported race/ethnicity/gender ownership characteristics in the GSPC sample, the estimated parameters of an Ordinal Logit BRM with the dependent variable being a categorical variable for the number of times the firm was denied a private commercial bank loan firm between the years 2014 – 2019.

The estimated odds ratios in Table 31 reveal that for the six distinct broadly classified SMWBEs in the GSPC sample, relative to non-SMWBEs—the excluded group in the CRM specification—Disadvantaged firms have more bank loan denials, as the estimated odds ratio is greater than unity and statistically significant in this instance. When disaggregated by the race/ethnicity/gender of owners, the results in Table 32 suggest that firms owned by Black Americans and Native Americans have more commercial bank loan denials relative to non-SMWBEs. This suggests that among SMWBEs in the Frederick Market Area, firms that are Disadvantaged, owned by Black Americans, and owned by Native Americans are relatively more likely to have their capacity to compete in the market for public procurement constrained as a result of private sector credit market discrimination.

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<sup>80</sup> See: Bates, Timothy. 2009 "Utilizing Affirmative Action in Public Sector Procurement as a Local Economic Development Strategy." *Economic Development Quarterly*, 23: pp. 180 - 192., Bates, Timothy, and Alicia Robb. 2013. "Greater Access to Capital is Needed to Unleash the Local Economic Development Potential of Minority owned Businesses." *Economic Development Quarterly*, 27: pp.250 - 259., and Shelton, Lois M., and Maria Minniti. 2018. "Enhancing product market access: Minority Entrepreneurship, Status Leveraging, and Preferential Procurement Programs." *Small Business Economics*, 50: pp. 481-498.



Table 31: Ordinal Logit Parameter Estimates-Bank Loan Denials (Odds Ratio):

Owner Racial/Ethnic Status and Commercial Bank Loan Denials

In Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Number of times denied commercial bank loan (Ordinal)		
Firm owner has more than 20 years' experience	0.8938	0.7031
Firm has more than 10 employees	1.25	0.5091
Firm owner has a baccalaureate degree	.4874	<b>0.0183</b>
Firm gross revenue greater than 1.5 million	2.52	<b>0.0064</b>
Firm bonding limit greater than 1.5 million	0.7784	0.5982
Financing is a barrier for securing City of Frederick projects	4.59	0.0857
Firm is in the construction sector	0.6613	0.2142
Firm is registered to do business with the City of Frederick	1.165	0.8831
Firm is willing/able prime contractor for the City of Frederick	2.56	<b>0.0316</b>
Firm is willing/able subcontractor for the City of Frederick	1.153	0.9862
Firm is a certified Minority Business Enterprise	1.346	0.4715
Firm is a certified Woman Enterprise	0.7035	0.2417
Firm is a certified Disadvantaged Business Enterprise	2.213	<b>0.0512</b>
Firm is a certified Small Business Enterprise	0.8146	0.6138
Firm is a LGBTQ Business Enterprise	0.9569	0.9893
Observations	255	
Pseudo $R^2$	0.0713	

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Table 32: Ordinal Logit Parameter Estimates-SMWBE Commercial Bank Loan Denials

## SMWBE Status and Commercial Bank Loan Denials

## In Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Number of times denied commercial bank loan (Ordinal)		
Firm owner has more than 20 years' experience	0.8359	0.6214
Firm has more than 10 employees	1.23	0.5217
Firm owner has a baccalaureate degree	0.6127	<b>0.0218</b>
Firm gross revenue greater than 1.5 million	2.28	0.0763
Firm bonding limit greater than 1.5 million	0.6825	0.5717
Financing is a barrier for securing City of Frederick projects	5.61	0.0685
Firm is in the construction sector	0.6927	0.2183
Firm is registered to do business with the City of Frederick	0.8624	0.5817
Firm is willing/able prime contractor for the City of Frederick	2.78	<b>0.0038</b>
Firm is willing/able subcontractor for the City of Frederick	1.145	0.7936
Firm is Black American owned	1.261	<b>0.0413</b>
Firm is Hispanic owned	1.252	0.0715
Firm is Asian American owned	1.581	.4832
Firm is Native American owned	7.216	<b>0.0275</b>
Firm is biracial/multiracial owned	0.4216	0.4147
Firm is Woman owned	0.6437	0.1352
Observations	255	
Pseudo $R^2$	0.0652	

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## F. Conclusion

A descriptive and inferential private sector analysis of the Frederick Market Area revealed that in general, being an SMWBE in the Frederick Market Area is associated with lower firm revenue, and lower self-employment likelihoods, which lends some support to the “but-for” justification for affirmative action in public procurement. Lower revenues for SMWBEs in the Frederick Market Area are suggestive of private sector discrimination that undermines their capacity to enter the market and compete with non-SMWBEs firms for public contracting and subcontracting opportunities. The results of our building permit analysis suggest that MWBEs in the Frederick Market Area face barriers to participating in the local market economy. In other relevant outcomes, the regression results reported in Appendix G provide specific detail on which particular SMWBEs in the broad Frederick Market Area are potentially constrained by discrimination that could translate into lower likelihoods of winning prime contracts. In general, the regression results suggest that firms owned by Black Americans, are particularly harmed by perceived discrimination against them by the City. We also find that among SMWBEs in the Frederick Market Area, firms classified as disadvantaged, and owned by Women are relatively more likely to have their capacity to compete in the market for public procurement constrained as a result of private sector credit market discrimination.

## VII. ANECDOTAL EVIDENCE

### A. Introduction

This chapter of the Disparity Study offers anecdotal evidence to support the Study team's overall findings from an analysis of the perspectives, viewpoints, opinions, beliefs, and experiences provided by business owners, community organizations, and other stakeholders that contract, do business, or interact commercially with the City of Frederick ("City") or operate within the City of Frederick and Frederick County Marketplace. The Study team gathered qualitative data by using a variety of methods, including the use of multiple layers of evidence collection to track frequently occurring responses and the engagement of a wide spectrum of individuals to participate in the Study. The team began the process by conducting an informational meeting to educate community members on the Study's role and its methods. Next, the Study team invited stakeholders to participate in a variety of forums, including two community engagement meetings hosted online, an online focus group, one-on-one interviews, an online survey, virtual meetings with area industry organizations, and solicitation of email commentary.

It should be noted that in many cases, the expressions of the interviewees may not comport with the policies, procedures, and practices of the City of Frederick and may not include acknowledgements of programs already provided by the City. Although GSPC encourages the reader to review the policy chapter of this study, anecdotal evidence represents the valid perceptions of those giving evidence.

Findings from the Study reflect anecdotal evidence of an informal network excluding all but a few select firms from participation in public contracting, and the need to improve and expand upon outreach efforts to Disadvantaged Business Enterprises (DBEs) ready, willing, and able to bid on and complete City projects.

The Study team circulated an Online Survey of Business Owners widely throughout the area requesting feedback about both anecdotal and demographic experiences, and engaged with a randomly-selected, diverse group of local vendors and businesses for several 30- to 60-minute virtual or phone interviews. GSPC convened a virtual focus group of randomly-selected stakeholders to draw from discussions about working with the City, as well as two virtual public engagement meetings that were widely publicized through social media, press releases to area media, email blasts, and announcement on the Study website. The goal of the online interaction for both the focus group and the two public meetings was to adhere to safe social distancing practices recommended by state and federal governments during the ongoing COVID-19 crisis. Members of several community and/or industry organizations were interviewed to gain insight on the general business environment in the City of Frederick and the surrounding metropolitan area. Finally, Email commentary was gathered through the duration of the Study.

What follows is a combination of the feedback the Study team received from the various information gathering methods that are arranged according to subject matter and type of analysis. It should be noted

again that these are the experiences and perceptions of each of the commenters which may not align with the City of Frederick's policies or practices.

## **B. Anecdotal Interviews**

The Study gathered insight from a diverse and random sample of vendors and business owners working and operating within the City of Frederick area and the surrounding marketplace. Thirty-two (32) businesses were chosen to interview. The demographic makeup of interview subjects went as follows: two (2) American Indian owned businesses, four (4) Black Woman owned businesses, six (6) Black Male owned businesses, one (1) Hispanic Woman owned business, four (4) Hispanic Male owned businesses, seven (7) Non-Minority Women owned businesses, four (4) Asian American Male owned businesses, one (1) Asian Woman owned business, and three (3) Non-Minority male owned businesses. Participating business segments included graphic design, trucking, furniture design and sales, event planning, decorations, corporate training, business management consulting, architecture, land development, construction, information technology, accounting, computer automation, construction materials supply, city planning, apparel, marketing, parking, equipment sales, and engineering. Each interview covered a variety of topics, ranging from business origins to barriers to working with the City of Frederick. The following narratives represent the subjects most frequently mentioned.

## **C. Informal Networks**

Relationship building is a part of doing business, although informal networks go a step beyond. At best, informal networks tend to favor the same firms with which an agency is familiar because of perhaps a previous working arrangement. At worst, informal networks serve as back channels providing information and preference to the same firms. In either case, they exclude the entrance of new firms into doing business with a public agency. While private sector firms can legitimately and exclusively use the same firms over and over, that practice is not permissible with publicly funded work because it feeds a continuing practice of exclusion of underutilized tax paying populations.

Some firms in the Frederick marketplace who could potentially do business with the City of Frederick said such an informal network is what stymied efforts to win contracts. According to an online survey of 256 business owners conducted as part of the Study, nearly 43% of respondents said they believed that some form of an informal network monopolized public contracting with the City. More than 44% of respondents agreed to some extent with the idea that an informal network kept them from doing business with the City.

American Indian HVAC owner AI-20 said in Frederick, local businesses get preference. "You see local contractors at a lot of bid meetings," he said in his June 26, 2020, interview, noting that he was never invited to the "inside meetings" for bids.

AI-32, an African American food and beverages distributor, said he struggles to gain any footing. "It's about relationships in Frederick, and historically it hasn't been easy to make inroads," he said in his interview on

June 19, 2020. While he has been able to do limited work with the City, his meetings with City leaders have not resulted in any long-term product placement. “Knowing the right City officials would open doors,” AI-32 said. But his largest barrier to success is a lack of relationships with those City leaders.

Non-Minority Woman owned heating and air conditioning business AI-26 said she believes she is being excluded from information about possible opportunities with the City of Frederick. “The ‘Good Ole’ Boy’ system is in place,” she said in her June 26, 2020, interview, expressing her assumption that “those people in that network are the ones getting the business with the City” because she doesn’t receive notifications or hear information from the procurement office.

Hispanic IT business, AI-7, said networking with the “right people” in the City’s procurement office has been a challenge and is easier to do in nearby Montgomery County. “The ‘Good Ole’ Boy’ network seems to dictate the marketplace,” AI-7 said in his July 7, 2020, interview. “It requires a lot more work to break through.” He said he is considered an “outsider” in the Frederick circle, which diminishes the connections he can make. While he continues to push to be included, AI-7 noted that the marketplaces in Montgomery County, Prince George’s County, and in Washington, D.C., are “much more accessible.”

AI-21, an African American IT firm, said his attempted foray from federal contracting into municipal work was discouraging because information about opportunities often seemed to be available just as larger firms claimed the work. “There is no question that there is a ‘Good Ole’ Boy’ network, which, while not necessarily race discriminatory, is certainly closed to new members,” he said in his June 24, 2020, interview. AI-21 considered participating in network events “a waste of my time.” “Either the information online was dated and those ‘in the know’ had already received the contract before it even appeared online ... or the contract was ‘wired’ for a particular company, or in order to get a second look you needed to know someone who knew someone.”

Despite having trouble getting her foot in the door in the Frederick marketplace and failing to win contracts with the City, Non-Minority graphic designer AI-3 said she does not mind if the City of Frederick uses the same vendors for jobs. “Frederick has excellent graphic talent that they work with consistently,” she said when interviewed on July 23, 2020. “They are perfectly entitled to use the companies they feel comfortable with.”

AI-25, a Non-Minority web designer and Internet consultant, has not worked for the City in more than a dozen years. In her June 26, 2020, interview, she complimented the City because it “still has a small-town feel in that everyone still knows everyone in the city.”

#### **D. Outreach and Visibility**

Limited communication and outreach from the City regarding public contracting opportunities was identified by many of the interviewees as an issue.

In the survey of vendors and potential vendors, nearly 44% said they were not registered to do business with the City of Frederick and almost 66% admitted that they were unaware that there even was a registry to work with the City. More than 21% of survey respondents said they did not know how to register with the City. And more than 27% of DBEs said they were not certified with the City's MBE/DBE program, with nearly 19% of those uncertified businesses citing a lack of understanding of the certification process.

Construction materials supplier, AI-14, said it was difficult to find time to search for qualifying bid opportunities. "The information needs to be more accessible," he said when interviewed on June 29, 2020. "As small businesses, we don't have the capacity to browse for opportunities all day." AI-14 also complained that the procurement system designed to help businesses find City bids is built on a Microsoft Windows operating system, which is not compatible with the Apple operating system he uses.

AI-2, an American Indian who owns a construction contracting company, said finding work with the City has been difficult since the last contract he had 20 years ago. When interviewed on July 20, 2020, he said, "I don't get direct access information about job opportunities from the general contractor."

Landscape equipment company AI-10 said the City procurement process is inefficient but acknowledged that "the procurement process has a lot of waste" from which he benefits. The Non-Minority owner pointed to recent changes in the email part of the procurement process when he said in his July 5, 2020, interview: "It seems like every five years or so they change the platform. If all the procurement people have to be retrained, it causes challenges." He said there is "disconnect between the people in business and the person behind the procurement desk."

AI-19, an African American business consulting firm, said not knowing how to work with the City prevents her from helping her clients make ties with the City. Although she is registered on the State of Maryland portal for doing business with the state, there are no evident ties to the City of Frederick. So, she cannot find out how to do business with the City or direct her clients to do so. "By not having an online portal where opportunities are posted, or a particular department or liaison group that connects with business owners directly on a regular basis around government contracts," the City is missing a chance to connect. She offered this advice to City officials: "Governments in VA and parts of MD, and in DC agencies have government liaisons or departments or agencies that reach out to biz owners directly about opportunities to work on government contracts."

Asian engineering firm AI-6 said he has not been able to work with the City because of a lack of contact. "I haven't received any notices, ads, emails or other information about possible contract jobs," he told an interviewer on July 14, 2020. He said he "finds it hard to believe," because he is an engineering firm and a registered Minority Business Enterprise and Small Business Enterprise. "I feel discriminated against," he said.

AI-9 provides project management, leadership and communication training and training in conflict management, among other things. The Non-Minority principal woman owned firm said she has not seen any solicitations from the City in her field. When interviewed on July 9, 2020, AI-9 said she registered to receive RFP's and other potential bidding information from the City. "But nothing comes for my line of work," she said. She did, however, say that "there has been more of a focus on seeking out people of color for various opportunities."

AI-12 said she has not tried to pursue business with the City of Frederick because of a lack of information. The Asian IT consulting firm said the City "should have the capacity to pull her company's information and the information of other companies to send out mass emails about events, jobs, etc.," she said in a June 30, 2020, interview. She said she did receive information regarding working for the City's school system within a month of the interview. "I responded, but never heard back."

African American events company AI-17 said he only learns about City of Frederick bidding opportunities "if I stumble upon them. And oftentimes, it's too late." Those bidding opportunities, he said when interviewed on June 29, 2020, might be closed. Among the barriers to doing business with the City, AI-17 counts not having a clearly defined way to inform various City departments about his services. "There's not an opportunity for networking," he said. "Barriers include not knowing about what's available to bid. The communication is not there."

AI-15, a Hispanic trucking firm owner, had positive insight about a registration process that he considered "tough." "Now I'm working with someone who can help me get through paperwork and the application process," he said when he was interviewed on June 30, 2020.

### **E. Public Hearings**

GSPC convened two virtual public engagement meetings on September 1, 2020, and September 2, 2020, to allow for comment from community and business stakeholders. The events were conducted virtually to allow participants to safely observe social distancing guidelines established by state and local authorities to protect against COVID-19. At each engagement meeting, a GSPC representative introduced the Study outlining the purpose of the meeting before opening the floor for participants to speak. In this forum, GSPC does not respond to comments or answer questions except to clarify items for the record as to avoid influencing anyone's perspectives.

A total of 45 local business owners or area stakeholders attended the two meetings, with 30 on September 1, and 15 in the second session. The Study team sent invitations via email blast to all the vendors in the database for the area, and press releases were distributed in the community and to local civic and trade organizations to solicit their participation. Because a transcript was produced, each participant who spoke was asked to state his or her name for the record. During each session, the Study team listened to a collection



of business advocacy organizations and businesses who offered specific ideas and opinions about the City of Frederick's business programming or barriers to participation, and ideas for improvement.

PH-11 expressed concern that prime contractors are not being held accountable if they do not hire capable DBE subcontractors for projects. "A lot of times, primes abuse the policy that allows them to say they can't find an MBE," the Black American owned professional services firm said. "Can Frederick County or the City or whomever make sure that there is nobody in the area that actually is an MBE, when they say there isn't?"

Ecologist PH-9 and designer PH-8 both agreed, adding that nothing can force primes to be honest if there are percentage goals for hiring Minority contractors codified into the City policy. "If you look at some of the more recent RFPs from the City, they do mention that the prime firm should look for an MBE or DBE," he said. "But they don't have a percentage. Without a percentage ... without a requirement, they're going to want to keep all of that work for themselves." PH-8 added, "right now, they're saying there's no policy, so they don't have to follow anything. There's a big thing that has to happen. Otherwise, we're just spinning our wheels."

The result of a lack of oversight combined with minimal outreach, architect PH-4 said, is that smaller firms stop trying to bid on contracts with the City of Frederick and other similar municipalities. "If nobody follows up to see if the small architecture got anything out of the project, we lose," he said. "That's when we read those RFPs and say, 'forget about it.' I don't have time to waste on those projects."

Printing and sign making firm PH-5 said the existence of a staunch informal network in the City discouraged many small and start-up businesses, particularly those owned by minorities, from trying to participate in public contracting. "We call it an 'Old Boys' network," he said. "If you're not in that network ... in that consciousness ... it's very difficult ... near impossible for you to be able to get in line to be able to do things." Particularly with contracts of less than \$50,000, for which bidding is not required, PH-5 said the paying party typically chooses who gets job. "People walk away from them because it's the same ... company over and over. We usually find out that there is a prior relationship between the person in charge of the spend and the business in the community."

PH-1 owns a painting company and said City officials are selective about who gets bids. "The City is not really open to doing business with people from outside the municipality," he said. "There is no follow-up, no real openness, no transparency regarding procurement. I travelled to a pre-bid meeting and didn't get a follow-up, and the primes there were not interested in talking to me."

Firms cited unreasonable requirements on RFPs as consistent barriers to doing business with the City. Both PH-14 and PH-3 cited occasions in which the bar for qualification seemed arbitrarily set. "If you've put out an RFP to work on a school, and say if we've done four schools, the bar is set at five schools," PH-3 said. PH-14 added that requirements as well as contract sizes were prohibitive. "If you're asking for the 'famous

five in five years,' depending on what it is, they may not have had as a city five of these (projects) in the last five years, so the experience doesn't come from them," she said. "And if the scope is so large that you can't show another project in that dollar amount, then you're automatically disqualified."

PH-16, an IT management firm, drew from his experience working with the Federal Government and the State of Maryland when offering suggestions for City leaders. "First of all, we need set-asides," he said. "Doing business with State of Maryland, there are percentages, specifically because they know in certain categories (African American or Hispanic) there are certain prejudices that keep us out of those services" like information technology or engineering. PH-16 also suggested that City buyers provide forecasting and that the City offer procurement tutorials to teach small firms, newcomers, and DBEs how to do business with the City.

#### **F. Focus Group**

GSPC hosted a virtual focus group on September 3, and the Study team facilitated the group using an online meeting platform to provide a safe social distancing option for attendees and team members.

Potential participants for each group were selected from a random group of vendors in a database comprised of Maryland businesses. The purpose of each focus group was to engage participants of varying backgrounds in dialogue in a semi-anonymous environment. Twenty individuals confirmed for the event, although only two participants logged on for the session.

Neither FG-1 nor FG-2 – each certified with Maryland as DBEs – had done business with the City of Frederick. Both admitted that prior to being invited to participate in the study, they had never considered attempting to do business with the City. However, both business owners provided advice for City leaders looking to create an aspirational procurement program.

FG-2, a Black Woman owned consulting firm, recommended that staunch oversight be applied to prime contractors. Her advice calls for disincentives for primes found circumventing any requirements codified into new policy. "If the City of Frederick does work, and you're in business with both a prime and a sub and the prime is not doing their job, a new prime can come in and the sub can still do their job," she said.

FG-1 runs a Black Woman owned marketing company. She suggested that the City create a lending program to assist small firms that might need to spend money to prepare for a contract but do not have cash on-hand. "I would love to have a program in a place like Frederick where they can have access to short-term

loans to help us float business,” FG-1 said. “They can use the receivable that we’re waiting for as collateral, so we’re not taking money out on an existing contract to pay for the contract.”

Both said outreach from the City would contribute to successful businesses and projects. “When we won a bid, we had a partner within the agency,” FG-1 said. “Having someone who is committed to the project just by checking in goes a long way. Don’t just leave us out there to hang, because that is a great way to have a project fail.”

### **G. Organizational Meetings**

The Study team reached out to several business and community organizations serving the City of Frederick area to draw out insight and opinions on behalf of the businesses in the marketplace. Representatives from six (6) organizations agreed to be interviewed to offer diverse viewpoints of area businesses about working with the City and about the general atmosphere of the marketplace.

The state-affiliated ORG-3 oversees Minority and woman-owned business participation across Maryland. However, while the state regulates business with state funded project, including public schools, ORG-3 does not have influence over county-led activities, nor municipalities. They do provide outreach to MBEs and SBE state-wide that are certified through the Maryland Department of Transportation. Outreach also focuses on Minority Women and Veterans.

ORG-1 is in its second year as a state-wide organization representing LGBTQs and is looking to align with its national counterpart. They said the City of Frederick represents a national movement to grow inclusion. “They’re pushing truly for equality, equity and justice,” ORG-1 said. “There’s a strong sense of collaboration that spills past Frederick.” The organization leader said systemic change was happening, and the City was a nice foundation to build upon. Baltimore created a legal designation for LGBTQ businesses and work is underway to determine how best to identify members of the community, ORG-1 said. Likely marriage licenses or legal affidavits are being considered.

ORG-5 provides information to healthcare facilities to close the health disparity gap for members of the LGBTQ community. Most members come to the organization through word of mouth with the desire to learn how to be better allies. ORG-5, among other things, plans annual Pride events in the City, educates businesses wanting to be inclusive, connects with area support groups and advocates for equality and equity for LGBTQ.

ORG-2 said he has worked with small Minority businesses for years and has seen a persistent issue with start-up capital. Beyond that, he said the barriers to winning contracts with the City of Frederick include bonding, being invited and included in the process, and a lack of outreach. He said the City is regarded with an attitude that “the governmental system was not a resource or venue to get business going.” ORG-2 does

not think the City's contracting process is fair and takes issue with the "good faith effort" statement that allows prime contractors to explain away not having MBE or DBE subcontractors on their projects. "The good faith statements are terrible," he said, paraphrasing it with his own interpretation as, "we used this firm before and we liked it, so we used it" again. "There's no monitoring or enforcement of the laws that exist," ORG-2 said. He believes the City should devote personnel to overseeing contracting and any aspirational goals put into place.

ORG-6 helps Women navigate the process of launching Women owned firms. The organization works in conjunction with Frederick County, and provides training, information about funding, and more. "They provide one-on-one counseling that is not charged for, helping start a business, do a business plan, navigate procurement, and we also do workshop training," ORG- 6 said.

The current Mayor of Frederick created ORG-4 to look beyond simply dysfunction regarding Minority and Women owned business in the City and work toward solutions. The organization is generating recommendations eventually intended to go before City leaders to vote into potential law. "We are trying to drive the policy that improves the procurement level at macro and micro levels," ORG-4 said. A program giving preference to local businesses already exists. Asked how that program might impact proposed DBE legislation, ORG-4 said, "there are so many layers to it. We aren't quite sure of the best course of action." As a result, the organization awaits the result of this Study to help guide the best path to take. The City is actively creating a DBE certification that ORG-4 said will be more stringent than MDOT requirements.

#### **H. Survey of Business Owners**

As a part of the Anecdotal evidence gathering, the Study team polled 256 area firms contacted from the City of Frederick vendor database, an online survey. The survey findings align with the concerns raised across demographics regarding the current state of business in the City and in the surrounding marketplace. Vendors expressed concerns about internal networks blocking opportunity for all but a few selected firms, and regarding a lack of information about doing business with the City of Frederick.

Overall, more than 42% of those surveyed said they believed there was an informal network that monopolized business dealings with the City of Frederick. This includes more than 40% of Women respondents and nearly 59% of Black American respondents. See Appendix H, Q74 of the Survey of Business Owners.

Of 104 respondents, about 44% either agreed or disagreed with the statement that "exclusion from an informal network prevented" their respective firms from winning contracts with the City of Frederick. This amount is compared to 50% who neither agreed or disagreed with the statement, and just under 4% that disagreed. See Appendix H, Q75 of the Survey of Business Owners.

Nearly half of the firms surveyed responded when asked why they were not registered to work with the City. Of those respondents, almost 66% indicated that they were unaware of a registry. That number included more than 65% of Black Americans who responded, 68% of Women who responded, and half of the Hispanic respondents. Of that same number, 12% of Women surveyed and nearly 22% of Black Americans said they did not know how to register with the City. Overall, more than 13% of those surveyed said they did not see opportunities for work reflected in their respective fields of work, including more than 12% of Non-Minority firms and 20% of Women firms. Nearly 30% of Black American owned firms indicated they did not try to register out of a disbelief that they would be awarded a contract. See Appendix H, Q19 of the Survey of Business Owners.

Of 256 respondents, about 17% reported having worked on City of Frederick projects as prime contractors. Of that number, fewer than 3% were Black American owned firms and there were no Asian American or Hispanic owned firms. Only about 11% reported being hired to work as subcontractors, including less than 7% of Hispanic owned firms and fewer than 3% of Black American owned firms. See Appendix H, Q29 of the Survey of Business Owners.

Of the list of barriers to winning a contract for work with the City of Frederick, firms indicated most frequently that unfair competition from larger firms – responding at a rate of nearly 21%. Nearly 36% of Asian American owned firms, more than 31% of Black American owned firms, and 14% of Women owned firms responded affirmatively to this factor as a barrier. From the survey, other notable barriers included “Excessive Experience Requirements” at more than 14% overall, “Limited Time Given to Prepare Bid Package or Quote” at nearly 13%, “Excessive Paperwork” at about 12%, and “Limited Knowledge of Purchasing/Contracting Policies and Procedures” at just under 12%. Black Americans represented the largest percentage group impacted by these identified barriers, respectively at 31.2%, 21.1%, 17.4%, 10.1%, and 14.7%. See Appendix H, Q33, Q35, Q41, Q42, and Q50 of the Survey of Business Owners.

More than 18% of the firms surveyed indicated a lack of understanding of the process to be certified with the City as a Disadvantaged Business Enterprise. This includes more than 23% of Women and nearly 18% of Non-Minority firms. See Appendix H, Q59 of the Survey of Business Owners

Nearly 35% of respondents said they did not understand how certification with the City would benefit their respective firms. See Appendix H, Q65 of the Survey of Business Owners

More than 16% of Black American owned firms polled said they felt they had experienced some form of racial, gender, or ethnicity discrimination in their dealings with the City of Frederick. This is out of the roughly 10% of firms overall that reported either having seldom, often, or very often experienced discrimination. See Appendix H, Q73 of the Survey of Business Owners

Nearly 40% of those firms surveyed indicated a belief to some degree that double standards in qualifications and work performance made it more difficult for Minority, Women, Disadvantaged, Small and LGBTQ businesses to win jobs. About 70% of Black American owned firms polled either agreed or strongly agreed with this statement. However, more than 24% of Women either disagreed or strongly disagreed versus nearly 16% who either agreed or strongly agreed. See Appendix H, Q76 of the Survey of Business Owners

Nearly 34% of those polled either agreed or strongly agreed that prime contractors contact Minority, Women, Disadvantaged, Small, or LGBTQ businesses to ask for quotes, but never seriously consider awarding a contract to those respective firms. Half of the Black American owned firms either agreed or strongly agreed, while more than a quarter (27.1%) disagreed with this statement to some extent. The City requires that prime contractors make a “Good Faith Effort” to include DBEs (see Policy Chapter). See Appendix H, Q78 of the Survey of Business Owners

Nearly half of the firms surveyed indicated some level of belief that DBEs were viewed as less competent than their Non-Minority counterparts. Overall, 46% offered an affirmative response (23% agreed, and 23% strongly agreed), with more than 46% of Black American owned firms agreeing and more than 38% of Women owned firms agreeing to some extent. See Appendix H, Q80 of the Survey of Business Owners

More than 43% of those surveyed attested to some degree of belief that prime contractors only used Minority, Woman, Disadvantaged, Small, or LGBTQ businesses when the City required it. According to City policy, prime contractors are required to make a “Good Faith Effort at DBE inclusion” and must detail reasons for not using DBEs as subcontractors (see Policy Chapter). See Appendix H, Q81 of the Survey of Business Owners

## **I. Email Comments**

For the duration of the Study, the Study team asked business owners who were either active or seeking to be active in the City of Frederick and the surrounding marketplace respond to the email address [FrederickStudy@gspclaw.com](mailto:FrederickStudy@gspclaw.com) to provide commentary and offer further insight. The Study team monitored the email address to supplement the broader compilation of data collected and gathered. This method proved highly effective in obtaining commentary from business owners who may not have been randomly selected for focus groups or interviews or may have missed the public engagement meetings. Commentary received in this manner reflects opinions about doing business with the City as well as the Study itself.

Additionally, a chat room was available as a feature of the virtual public engagement meetings as an option for those who logged on but only wanted to share their experience with the City in writing.

EC-3 identified the absence of any reference to Veteran Business Enterprises in the Study's online survey and expressed his disappointment. "If you're looking for disparity in procurement, look into the MBE participation percentage goals for other MBE firms compared to the participation percentage goals for SDVOSB and VOSB," he said. "(They are) either 95% less or completely excluded from the requirement. Our service Men and Women deserve better from the State of Maryland and the cities within and it starts by being included in surveys like yours."

EC-1 said more and more, opportunity should be made available to individuals and business owners on the lowest ends of the economic spectrum. "Mathematically in social aggregate, it is a truism that disparity gaps can only begin to stop widening if and only if higher value-added business activities are effectively open to lower income and wealth cohorts," the respondent wrote. However, EC-1 warned that the outcomes of this Study should consider certain nuances regarding economic levels among organizations that are part of the MWBE community. "It has been found in a study by the New York City Comptroller's Office of Diversity that even within a diverse/MWBE universe, wealth and income inequality continues to persist, and that such levels of disparity are comparable to those outside of the diverse/MWBE universe."

EC-4 said his business operated without regard to race, gender, ethnicity, or any other classifications. "For many years I have succeeded on my own merits, without regard to any special classification or set-aside," he said. "I also do not include race, gender, national origin, and so on, in any business decision I may make. EVERYONE who needs my help will get it, provided their requests are safe and legal, and that they possess integrity as I do."

EC-2 pointed out an oversight by a City program. "Our company was overlooked by the City of Frederick Grant and the Frederick County Grant," he said.

## J. Conclusion

The Study found anecdotal evidence of an entrenched informal network that excluded small businesses, business owners new to the City of Frederick and the surrounding area and minorities. Findings from the Study also presented a need for greater outreach to potential vendors and contractors willing and able to do business with the City.

Stated concerns about unreasonably high – sometimes arbitrarily so – standards to qualify to work with the City and alleged abuse of "Good Faith Efforts" by prime contractors to bypass DBE hiring did appear during the qualitative data gathering.

However, the most notable commentary pointed to the repeated use by City officials in charge of public spending, or by prime contractors, of the same firms repeatedly to the omission of other able businesses.



The question of just how connected the aforementioned issues have been in establishing and maintaining these informal networks was not answered during the evidence collecting process.

But greater oversight of prime contractor and City activity, along with more comprehensive outreach to firms available to do business with the City may help to level the playing field.



# APPENDIX A

## City of Frederick Disparity Study Definitions

## **Appendix A – Disparity Study Definitions**

**Anecdotal** - A reported personal experience or encounter, retold through interview, testimony, email, or survey. Not necessarily verified or based on research.

**Architecture & Engineering** - For the purposes of the City of Frederick Disparity Study refers specifically to construction-related professional services such as architecture, engineering, surveying, construction management.

**Availability Estimates** - A term of art in disparity studies that refers to the percentage of ready, willing, and able firms in the entity's Relevant Geographic and Product Markets in each work category that is disaggregated by race/ethnicity/gender.

**City of Richmond v. J.A. Croson Company 488 U.S. 469 (1989) (“Croson”)** – Laws that, on their face, favor one class of citizens over another, may run afoul of the Equal Protection Clause of the 14<sup>th</sup> Amendment of the U.S. Constitution even if those laws are meant to remedy discrimination. Such laws, including those that create race conscious programs, must withstand judicial “strict scrutiny” or they will be dismantled. In its Croson decision, the Supreme Court ruled that the City of Richmond's Minority Business Enterprise program failed to satisfy the requirements of “strict scrutiny” review under the 14<sup>th</sup> Amendment. “Strict scrutiny” review involves two co-equal considerations to determine whether a race conscious program can withstand Strict Scrutiny: First, the need to demonstrate a compelling governmental interest (which may be established through periodic disparity studies); Second, implementation of a program or method narrowly-tailored to the findings of the compelling interest. In Croson, the Supreme Court concluded that the City of Richmond failed to show that its minority set-aside program was “necessary” to remedy the effects of discrimination in the marketplace.

**Construction** - For the purposes of the City of Frederick Disparity Study, Construction means the construction, erection, repair, renovation, or demolition of a public structure, building, street, road, wharf, and other public improvements. Construction Services is one of the City of Frederick's Study Industry Categories.

**Disadvantaged Business Enterprise (DBE)** - Means a for-profit independent operating small business concern:

- a) That is at least 51% owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51% of the stock is owned by one or more such individuals; and
- b) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

Minority and Women owned firms are presumed to be disadvantaged.

**Disparity Index** – A statistical measure demonstrated by the failure to meet parity between availability and utilization. Disparity is calculated by comparing the utilization percentage to the availability percentage of each race/gender/ethnic group. This will result in either overutilization, underutilization or parity.

**Disparity Study (“Study”)** – A Disparity Study is an objective research tool that determines whether a governmental agency has actively or passively discriminated against certain groups due to their race or gender. These studies measure disparities between availability and utilization for race, ethnicity, and gender groups.

Discrimination, which may be the present effects of past discrimination, is determined through quantitative (statistical) and qualitative (anecdotal) evidence, as well as an examination of current policies and procedures. The findings of the disparity study will result in recommendations by the study team to remedy

any discrimination or disparities found. The recommendations, if accepted, are intended to be implemented as policy.

**Fiscal Year (“FY”)** – The business year for City of Frederick for purchasing and accounting purposes. Measured by City of Frederick from July 1, 2013 through June 30, 2018. The study period for this study is FY 2014-2018.

**Frederick MD Market Area** – The City of Frederick Maryland market area is the Frederic Combined Statistical Area (CSA) of Washington- Baltimore- Arlington, DC-MD-VA-WV-PA.

**Good Faith Efforts (“GFE”)** – The documentation and verification process to ensure that prime contractors are soliciting and negotiating with MWBEs in “good faith” for potential subcontracting opportunities but were still unable to attain the goal.

**Goods** - For the purposes of the City of Frederick’s Disparity Study, Goods means commodities, materials, supplies, equipment., and other tangible items.

**LGBTQ Owned Businesses (LGBTQBE)** - For the purposes of the City of Frederick’s Disparity Study means businesses that are at least 51% owned by individuals who identify as Lesbian, Gay, Bisexual, Transsexual, or Queer.

**Industry Categories** - Means, collectively, the industry categories included in the Disparity Study, which are: Construction, Architecture & Engineering, Professional Services, Other Services, and Goods.

**Minority Business Enterprise (MBE)** - Means a for-profit independent operating business which is:

- a) A sole proprietorship in which the owner is a Minority Person who owns, operates, and controls the business; or
- b) A corporation in which at least 51% of the stock or asset is owned, operated, and controlled by one or more Minority Persons; or
- c) A partnership in which at least 51% of the assets of such partnership is owned, operated, and controlled by one or more Minority Persons; or
- d) Any other business or professional entity in which at least 51% of the assets in such business or professional entity is owned, operated, and controlled by one or more Minority Persons;
- e) Any entity in which at least 51% of the assets of such entity is owned, operated, and controlled by one or more Minority Persons and one or more women and such Minority Person; or
- f) A business which has been certified as an MBE under any recognized MBE program.

The ownership by Minority Person(s) must be real and substantial. The minority group member(s) must have operational and managerial control, interest in capital, and earnings commensurate with the percentage of ownership.

**Minority Person** - Means a citizen or legal resident alien of the United States who is: African American Asian American, Hispanic, Asian American, and Native American.

**Overutilization** – The measure by which the utilization percentage is higher than the availability percentage and the Disparity Index is above 1. In order to be statistically significantly overutilized, the Disparity Index must be 1 or more.

**Parity** – The absence of disparity, demonstrated by the utilization percentage being equal to availability percentage and the Disparity Index equaling 1.

**Prime Contractor** – A business who has entered into direct contractual relationship with the City of Frederick, or other public or private entity to provide a good or service.

**Professional Services** - For the purposes of the City of Frederick's Disparity Study means services which are performed competently only by a person or persons having a special skill, expertise, education, or knowledge which is primarily mental or intellectual in nature rather than physical or manual. Professional Services includes, but is not limited to, attorney services, technical services, research planning services, consulting services, auditing services, financial advisory services, instructional services provided by trained educators, and appraisal services. Professional Services is one of the City of Frederick's Study Industry Categories.

**Qualitative Analysis** – Also known as anecdotal analysis. Referring to a measurement of quality (ex. how good over how much). Typified through collection and analysis of constituents' anecdotal impressions, such as interviews, public hearings, focus groups, and other forms of commentary.

**Quantitative Analysis** – Commonly referred to as statistical analysis. Referring to a measurement of quantity over quality (ex. how much over how good). Typified by analysis of mathematical or statistical modeling.

**Regression Analysis** – Statistical measure used to determine whether the race, ethnicity or gender status of a business owner are an impediment in contracting in the City of Frederick marketplace and whether but for these, they would have the capacity to provide services on a higher level than is currently utilized.

**Relevant Geographic Market Area** - A term of art in disparity studies that refers to the geographical area in which the entity spends at least 75% of its dollars based upon firm location.

**Small Business Enterprise (SBE)** - Means a firm whose gross revenues or number of employees, averaged over the past three years, inclusive of any affiliates as defined generally by the U.S. Small Business Administration regulations related to the size standards found in 13 CFR Part 121 or specifically for the City of Frederick as it may so define small businesses.

**MWBE** - For the purpose of this Study, MWBE means Minority and Women Business Enterprises. A business so designated will have a certification designation or ethnicity and/or gender from an authorized certification agency recognized and approved by the City of Frederick.

**Strict Scrutiny** – The highest level of judicial scrutiny used in determining the constitutionality of laws.

**Study Period** – The period between which all City of Frederick contract awards are subject to study analysis. For this study it has been defined as July 1, 2013 - June 30, 2018 (FY2014-FY2018).

**Subcontractor** – A business who has entered into a direct contractual relationship with a Prime Contractor to either provide a good or service or perform a full scope, or portion of a scope of services.

**Underutilization** – The measure by which the utilization percentage is less than the availability percentage and the Disparity Index is below 1. In order to be statistically significantly underutilized, the Disparity Index must be .8 or less.

**Utilization** – A review of the City of Frederick's awards or payments to determine where and with whom Prime Contractor and Subcontractor were made. The analysis is conducted both with regard to the dollars in each race, ethnicity, gender group during each year of the Study.

**Utilization** - A term of art in disparity studies that refers to the percentage dollars paid to firms during the Study Period in the Relevant Geographic and Product Markets disaggregated by race/ethnicity/gender.

**Woman Business Enterprise (WBE)** - Means a for-profit independent operating business which is:

- a) A sole proprietorship in which the owner is a woman who owns, operates, and controls the business; or
- b) A corporation in which at least 51% of the stock or asset is owned, operated, and controlled by one or more women; or

- c) A partnership in which at least 51% of the assets of such partnership is owned, operated, and controlled by one or more women; or
- d) Any other business or professional entity in which at least 51% of the assets in such business or professional entity is owned, operated, and controlled by one or more women; or
- e) Any entity in which at least 51% of the assets of such entity is owned, operated, and controlled by one or more minority persons and one or more women; or
- f) A business which has been certified as a WBE under any recognized WBE program.

The ownership by woman/women must be real and substantial. The woman/women must have operational and managerial control, interest in capital, and earnings commensurate with the percentage of ownership.

## APPENDIX B

### City of Frederick Disparity Study Expanded Legal Analysis

## APPENDIX B – Expanded Legal Analysis

Having provided an overview of the significance and initial development of disparity studies, the following underscores the legal benefit to such studies should a DBE (or M/WBE) program or initiative be challenged in a court of law. There are several important legal standards and considerations which arise when a constitutional challenge to an DBE program is initiated, and each is addressed in turn. Following this discussion, GSPC provides in this analysis an overview of some of the key aspects of its Study methodology for gathering and analyzing statistical and anecdotal evidence (which provides the “factual predicate” for any remedial program/policy), and discussion of the underlying legal basis for them.

### 1. Equal Protection and Levels of Judicial Scrutiny

The Fourteenth Amendment provides that “No state shall . . . deny to any person within its jurisdiction the equal protection of the laws”. U.S. Const. amend. XIV, § 1. Courts determine the appropriate standard of equal protection review by “[f]irst. . . [determining] whether a state or local government has developed the program, or whether Congress has authorized the program’s creation”, then by examining the protected classes embodied in the statute. S. J. Groves & Sons Company v. Fulton County et al, 920 F.2d 752, 767 (11th Cir. 1991).

When a program or ordinance provides race-based policies or remedies, equal protection considerations are triggered and the court will apply what is referred to as “strict scrutiny” in evaluating its constitutional legitimacy. When gender-based, the program (or policy) will be reviewed under the less-stringent “intermediate scrutiny” standard. Finally, policies or remedies addressed to LGBTQ owned businesses will likely be evaluated under the least restrictive “rational basis” test, which is addressed in some detail herein.

#### a) Racial Classifications

“We have held that all racial classifications imposed by government must be analyzed by a reviewing court under strict scrutiny.” Grutter v. Bollinger, 539 U.S. 306, 326 (2003).<sup>1</sup> The Fourth Circuit previously put into sharp relief its view of the rationale for this level of judicial review:

Racial and ethnic distinctions of any sort are inherently suspect and thus call for the most exacting judicial examination. Wygant v. Jackson Board of Education, 476 U.S. 267, 273, 106 S.Ct. 1842 1846, 90 L.Ed.2d 260 (1986) (plurality opinion) (quoting Regents of the University of California v. Bakke, 438 U.S. 265, 291, 98 S.Ct. 2733 2748, 57 L.Ed.2d 750 (1978) (Powell, J.)). The rationale for this stringent standard of review is plain. Of all the criteria by which men and women can be judged, the most pernicious is that of race. The injustice of judging human beings by the color of their skin is so apparent that racial classifications cannot be rationalized by the casual invocation of benign remedial aims. City of Richmond v. J.A. Croson Co., 488 U.S. 469, 500, 109 S.Ct. 706, 724, 102 L.Ed.2d 854 (1989). While the inequities and indignities visited by past discrimination are undeniable, the use of race as a reparational device risks perpetuating the very race-consciousness such a remedy purports to overcome.... It thus remains our constitutional premise that race is

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<sup>1</sup> See also Adarand II, 515 U.S. at 212 (same).

an impermissible arbiter of human fortunes. [Podberesky v. Kirwin, 38 F.3d 147, 152 (4th Cir. 1994) (quoting Maryland Troopers Ass'n v. Evans, 993 F.2d 1072, 1076 (4th Cir.1993))]

“Under strict scrutiny, a racial classification must (1) serve a compelling state interest and (2) be narrowly tailored to achieve that interest.” Tuttle v. Arlington County School Board, 195 F.3d 698, 704 (4th Cir. 1999). These concepts are covered in greater depth below.

#### b) Gender Classifications

Though still unsettled in some federal Circuits, it appears in the Fourth Circuit that programs with gender-based classifications are evaluated for constitutionality under a more relaxed level of scrutiny than race-based ones, i.e., intermediate scrutiny:

Precedent dictates, and the parties agree, that courts apply “intermediate scrutiny” to statutes that classify on the basis of gender. Adkins v. Rumsfeld, 464 F.3d 456, 468 (4th Cir.2006); see also Miss. Univ. for Women v. Hogan, 458 U.S. 718, 724, 102 S.Ct. 3331, 73 L.Ed.2d 1090 (1982). A defender of such a statute meets this burden “by showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.” Hogan, 458 U.S. at 724, 102 S.Ct. 3331 (internal quotation marks omitted). Of course, intermediate scrutiny requires less of a showing than does “the most exacting” strict scrutiny standard of review. See Clark v. Jeter, 486 U.S. 456, 461, 108 S.Ct. 1910, 100 L.Ed.2d 465 (1988). [H.B. Rowe Co., Inc. v. Tippet, 615 F.3d at 242]

In light of the above, the gender-based classification component in the Frederick DBE program will be analyzed under level of scrutiny which would be easier for the City to meet under challenge than that which would be applied to the race-based component.

#### c) LGBTQ

For LGBTQ provisions, the level of constitutional scrutiny likely to be applied is the rational basis test. Under this analysis, the entity need only show a rational relationship between the classification/policy and a legitimate legislative goal or end.<sup>2</sup> The case law is not firmly established on this point at present, however, so GSPC includes a brief discussion of the current state of the law here.

The Supreme Court, in its 1996 decision in Romer v. Evans applied “rational basis” scrutiny in the context of municipal ordinances passed in Colorado to ban discrimination on the basis of sexual orientation (covering housing, employment, public accommodations, etc.).<sup>3</sup> Similarly, though not controlling precedent, Justice O'Connor wrote in her concurring opinion in Lawrence v. Texas, a same-sex/sexual orientation case, “[w]e have been most likely to apply rational basis review to hold a law unconstitutional

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<sup>2</sup> See generally, Romer v. Evans, et. al., 517 U.S. 620, 631 (1996).

<sup>3</sup> Id. at 631.



under the Equal Protection Clause where, as here, the challenged legislation inhibits personal relationships.”<sup>4</sup>

More recently, the United States District Court for the Western District of Texas opined that because homosexuals (or, presumably, other groups identified with reference to sexual orientation) are a suspect or quasi-suspect class of persons for constitutional protection purposes, a heightened level of scrutiny should be applied when policies are designed to deny protection. DeLeon v. Perry, 975 F.Supp.2d 632, 650 (W.D. Texas 2014) (in the context of a same-sex marriage ban). The DeLeon court ultimately chose not to resolve the question of heightened scrutiny, as it found the challenged legislation banning same-sex marriage as constitutionally deficient even under the lower “rational basis” standard.<sup>5</sup>

Accordingly, it appears at this time that rational basis scrutiny will be applied to any program or policy by the City of Frederick addressing certification categories other than race/ethnicity or gender.

## 2. Government as Active or Passive Participant in Discrimination

The Supreme Court has uniformly held that general societal discrimination is insufficient to justify the use of race-based measures to satisfy a compelling governmental interest.<sup>6</sup> Rather, there must be some showing of prior discrimination by the governmental actor involved, either as an “active” or “passive” participant.<sup>7</sup> The upshot of this dual-faceted (active/passive) evaluation of the enacting governmental entity is that, even if the entity did not directly discriminate, it can take corrective action.<sup>8</sup>

Subsequent lower court rulings have provided more guidance on passive participation by local governments. In Concrete Works of Colorado, Inc. v. City of Denver, 36 F.3d 1513 (10th Cir. 1994), the Tenth Circuit held that it was sufficient for the local government to demonstrate that it engaged in passive participation in discrimination rather than showing that it actively participated in the discrimination:

Neither Croson nor its progeny clearly state whether private discrimination that is in no way funded with public tax dollars can, by itself, provide the requisite strong basis in evidence necessary to justify a municipality's affirmative action program. Although we do not read Croson as requiring the municipality to identify an exact linkage between its award of public contracts and private discrimination, such evidence would at least enhance the

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<sup>4</sup> 539 U.S. 558, 580 (2003)(O'Connor, J., concurring).

<sup>5</sup> Id. at 652.

<sup>6</sup> Adarand II, 515 U.S. at 227; Croson, 488 U.S. at 496-97.

<sup>7</sup> Croson, 488 U.S. at 498.

<sup>8</sup> Engineering Contractors Association of South Florida v. Metropolitan Dade County, 122 F.3d 895, 907 (11th Cir. 1997) (“[I]f the County could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry, the Supreme Court has made it clear that the [County] could take affirmative steps to dismantle such a system.”); Croson, 488 U.S. at 492 (“Thus, if the city could show that it had essentially become a ‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry, we think it clear that the city could take affirmative steps to dismantle such a system.”).

municipality's factual predicate for a race/gender-conscious program. [Concrete Works, 36 F.3d at 1529]

Thus, the desire for a government entity to prevent the infusion of public funds into a discriminatory industry is enough to satisfy the requirement.

The next question, however, is whether a public entity has the requisite factual support for its program in order to satisfy the particularized showing of discrimination required by Croson. This factual support can be developed from anecdotal and statistical evidence, as discussed hereafter.

### 3. Burdens of Production/Proof

As noted above, the Croson court struck down the City of Richmond's minority set-aside program because the City failed to provide an adequate evidentiary showing of past and present discrimination as was its initial burden.<sup>9</sup> Since the Fourteenth Amendment only allows race-conscious programs that narrowly seek to remedy particularized discrimination, the Court held that state and local governments "must identify that discrimination . . . with some specificity before they may use race-conscious relief." The Court's rationale for judging the sufficiency of the City's factual predicate for affirmative action legislation was whether there existed a "strong basis in evidence for its [government's] conclusion that remedial action was necessary."<sup>10</sup>

The initial burden of production on the state or local governmental entity is to demonstrate a "strong basis in evidence" that its race- and gender-conscious contract program is aimed at remedying identified past or present discrimination. Merely stating a "benign" or "remedial" purpose does not constitute a "strong basis in evidence" that the remedial plan is necessary, nor does it establish a prima facie case of discrimination. Thus, the local government must identify the discrimination it seeks to redress and produce particularized findings of discrimination.<sup>11</sup>

A governmental entity may, for example, establish an inference of discrimination by using empirical evidence that proves a significant statistical disparity between the number of qualified M/WBEs, the number of M/WBE contractors actually awarded a contract by the governmental entity, or M/WBEs brought in as subcontractors by prime contractors to which a contract is awarded. The courts maintain that the quantum of evidence required for the governmental entity is to be determined on a case-by-case basis, and in the context and breadth of the M/WBE program it purports to advance.<sup>12</sup> If the governmental body is able to do this, then the burden shifts to the challenging party to rebut the showing.<sup>13</sup>

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<sup>9</sup> Croson, 488 U.S. at 498-506.

<sup>10</sup> Croson, 488 U.S. at 500 (quoting Wygant v. Jackson Bd. of Educ., 476 U.S. 267, 277, 106 S.Ct. 1842, 1849 (1986)).

<sup>11</sup> Croson, 488 U.S. at 500-01.

<sup>12</sup> See Concrete Works, 36 F.3d 1513 (10th Cir. 1994).

<sup>13</sup> Id.

Once the governmental entity has shown acceptable proof of a compelling interest in remedying past discrimination and illustrated that its plan is narrowly tailored to achieve this goal, the party challenging the affirmative action plan bears the ultimate burden of proving that the plan is unconstitutional. Sherbrooke Turf, Inc. v. Minnesota D.O.T., 345 F.3d 964, 971 (8th Cir. 2003) (“Sherbrooke and Gross Seed have the ultimate burden of establishing that the DBE program is not narrowly tailored.”); Geyer Signal, Inc. v. Minnesota D.O.T., 2014 WL 1309092, \*26 (D. Minn. 2014) (“The party challenging the constitutionality of the DBE program bears the burden of demonstrating that the government’s evidence did not support an inference of prior discrimination.”).<sup>14</sup>

#### 4. “Compelling Public Interest” Considerations

Although imposing a substantial burden, strict scrutiny is not automatically “fatal in fact.” Adarand, 515 U.S. at 237, 115 S.Ct. 2097. After all, “[t]he unhappy persistence of both the practice and the lingering effects of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it.” Id.; Alexander, 95 F.3d at 315. In so acting, a governmental entity must demonstrate it had a compelling interest in “remedying the effects of past or present racial discrimination.” Shaw v. Hunt, 517 U.S. 899, 909, 116 S.Ct. 1894, 135 L.Ed.2d 207 (1996).

Thus, to justify a race-conscious measure, a state must “identify that discrimination, public or private, with some specificity,” Croson, 488 U.S. at 504, 109 S.Ct. 706, and must have a “ ‘strong basis in evidence for its conclusion that remedial action [is] necessary,’ ” id. at 500, 109 S.Ct. 706 (quoting Wygant v. Jackson Bd. of Educ., 476 U.S. 267, 277, 106 S.Ct. 1842, 90 L.Ed.2d 260 (1986) (plurality opinion)); see also Podberesky v. Kirwan, 38 F.3d 147, 153 (4th Cir.1994). As courts have noted, “there is no ‘precise mathematical formula to assess the quantum of evidence that rises to the Croson ‘strong basis in evidence’ benchmark.’ ” Rothe Dev. Corp. v. Dep’t of Def., 545 F.3d 1023, 1049 (Fed.Cir.2008) (Rothe II ) (quoting W.H. Scott Constr. Co. v. City of Jackson, 199 F.3d 206, 218 n. 11 (5th Cir.1999)). [H.B. Rowe, 615 F.3d at 241]

This compelling interest must be proven by particularized findings of discrimination. The strict scrutiny test ensures that the means used to address the compelling goal of remedying discrimination “fit” so closely that there is little likelihood that the motive for the racial classification is illegitimate racial prejudice or stereotype.

The relevant case law establishes that the compelling state interests of remedying past discrimination and of avoiding discrimination in the context of governmental procurement programs are well-accepted, and not controversial at this point. See W.H. Scott Const. Co. v. City of Jackson, 199 F.3d 206, 217 (5th Cir. 1999) (“Combating racial discrimination is a compelling government interest.”).<sup>15</sup>

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<sup>14</sup> Citing Adarand III, 228 F.3d at 1166.

<sup>15</sup> See also Croson, 488 U.S. at 492 (“It is beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evils of private prejudice.”); Adarand II, 515 U.S. at 237 (“The unhappy persistence of both the practice and the lingering effects of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it.”).

## 5. Statistical Data and Anecdotal Evidence Combine to Establish Compelling Interest

The types of evidence routinely presented to show the existence of a compelling interest include statistical and anecdotal evidence.<sup>16</sup> Where gross statistical disparities exist, they alone may constitute *prima facie* proof of a pattern or practice of discrimination. Anecdotal evidence, such as testimony from minority or female business owners, is most useful as a *supplement* to strong statistical evidence, as it cannot carry the burden for the entity by itself. See infra.

For example, the Croson majority implicitly endorsed the value of personal accounts of discrimination, but Croson and subsequent decisions also make clear that selective anecdotal evidence about M/WBE experiences *alone* would not provide an ample basis in evidence to demonstrate public or private discrimination in a municipality's construction industry.<sup>17</sup>

Thus, personal accounts of actual discrimination or the effects of discriminatory practices are admissible and effective, and anecdotal evidence of a governmental entity's institutional practices that provoke discriminatory market conditions is particularly probative. In order to carry the day, however, such evidence must be supplemented with strong statistical proof:

A state need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence for concluding that remedial action is necessary. See, e.g., Concrete Works, 321 F.3d at 958. Instead, a state may meet its burden by relying on "a significant statistical disparity" between the availability of qualified, willing, and able minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors. Croson, 488 U.S. at 509, 109 S.Ct. 706 (plurality opinion). We further require that such evidence be "corroborated by significant anecdotal evidence of racial discrimination." Md. Troopers Ass'n, Inc. v. Evans, 993 F.2d 1072, 1077 (4th Cir.1993). [H.B. Rowe, 615 F.3d 241]

Of note, several courts have rejected assertions by plaintiffs attacking programs that anecdotal evidence must be verified to be considered as part of a governmental entity's evidentiary proffer.<sup>18</sup>

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<sup>16</sup> Croson, 488 U.S. at 501.

<sup>17</sup> Croson, 488 U.S. at 480 (noting as a weakness in the City's case that the Richmond City Council heard "no direct evidence of race-conscious discrimination on the part of the city in letting contracts or any evidence that the City's prime contractors had discriminated against minority-owned subcontractors"); See also Coral Construction Co. v. King County, 941 F.2d 910, 919 (9<sup>th</sup> Cir. 1991) ("While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, if ever, can such evidence show a systematic pattern of discrimination necessary for the adoption of an affirmative action plan.").

<sup>18</sup> Associated General Contractors of America, San Diego Chapter v. California D.O.T., 713 F.3d 1187, 1196-97 (9<sup>th</sup> Cir. 2013) ("AGC contends that the anecdotal evidence has little or no probative value in identifying discrimination because it is not verified. AGC cites to no controlling authority for a verification requirement. Both the Fourth and Tenth Circuits have rejected the need to verify anecdotal evidence."), citing H.B. Rowe, 6115 F.3d at 249; Concrete Works, 321 F.3d at 989. See also Kossman Contracting Co. v. City of Houston, Case No. H-14-1203, at 58 (S.D. Texas 2016) ("Plaintiff criticizes the anecdotal evidence with which NERA supplemented its statistical analysis as not having been verified and investigated. Anecdotes are not the sole or even primary evidence of discrimination in this case. . . . One reason anecdotal evidence is valuable supplemental evidence is that it reaches what statistics cannot: a witness' narrative of

a) Statistical Data Generally

In Croson, the court explained that an inference of discrimination may be made with empirical evidence that demonstrates “a significant statistical disparity between the number of qualified minority contractors . . . and the number of such contractors actually engaged by the locality or the locality's prime contractors.”<sup>19</sup> A predicate to governmental action is a demonstration that gross statistical disparities exist between the proportion of M/WBEs awarded government contracts and the proportion of M/WBEs in the local industry “willing and able to do the work,” in order to justify its use of race-conscious contract measures. Ensley Branch N.A.A.C.P. v. Seibels, 31 F.3d 1548, 1565 (11th Cir. 1994). In other words, a disparity study is intended to evaluate whether there is a statistically-significant disconnect – i.e., disparity – between the availability of and utilization of women- or minority-owned firms in public contracting.

In order to adequately assess statistical evidence, there must be information identifying the basic qualifications of minority (or women) contractors “willing and able to do the job” and a court must determine, based upon these qualifications, the relevant statistical pool with which to make the appropriate statistical comparisons.<sup>20</sup>

b) Availability

The attempted methods of calculating M/WBE (or DBE) availability have varied from case to case. In Contractors Association of Eastern Pennsylvania v. City of Philadelphia, 6 F.3d 990 (3rd Cir. 1993), the Third Circuit stated that available and qualified minority-owned businesses comprise the “relevant statistical pool” for purposes of determining availability. The Court permitted availability to be based on the metropolitan statistical area (MSA) and local list of the Office of Minority Opportunity for non-M/WBEs, which itself was based on census data.

In Associated General Contractors v. City of Columbus,<sup>21</sup> the City’s consultants collected data on the number of M/WBE firms in the Columbus MSA in order to calculate the percentage of available M/WBE firms. Three sources were considered to determine the number of M/WBEs “ready, willing and able” to perform construction work for the city. However, the Court found that none of the measures of availability purported to measure the number of M/WBEs who were qualified and willing to bid as a prime contractor on City construction projects because neither the City Auditor Vendor Payment History file, Subcontractor Participation Reports, or Contract Document Database of the City were attentive to which firms were able to be responsible or provide either a bid bond or performance bond. The Court wrote, “[t]here is no basis in the evidence for an inference that qualified M/WBE firms exist in the same proportions as they do in relation to all construction firms in the market.”<sup>22</sup>

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an incident told from the witness’ perspective and including the witness’ perceptions.”) (quotations and citations omitted).

<sup>19</sup>Croson, 488 U.S. at 509.

<sup>20</sup> See e.g., Associated General Contractors v. California D.O.T., 713 F.2d at 1197-1199.

<sup>21</sup> Associated General Contractors of America v. City of Columbus, 936 F. Supp. 1363 (1996), reversed on related grounds, 172 F.3d 411 (6th Cir. 1999).

<sup>22</sup> Associated General Contractors, 936 F. Supp. at 1389. The Court also questioned why the City did not simply use the records it already maintains “of all firms which have submitted bids on prime contracts”

In H.B. Rowe, availability was calculated using a vendor list that included: “(1) subcontractors approved by the Department to perform subcontract work on state-funded projects, (2) subcontractors that performed such work during the study period, and (3) contractors qualified to perform prime construction work on state-funded contracts.”<sup>23</sup>

Similarly, in Associated General Contractors v. California D.O.T., the court noted with approval that in the course of conducting its disparity study for Caltrans “[t]he research firm gathered extensive data to calculate disadvantaged business availability in the California transportation contracting industry”[,] and used “public records, interviews and assessments as to whether a firm could be considered available for Caltrans contracts[.]”<sup>24</sup>

A common question in collecting and applying availability data is whether prime contractor and subcontractor data needs to be evaluated separately; the trend is to accept combined data.

NCI’s argument is that IDOT essentially abused its discretion under this regulation by failing to separate prime contractor availability from subcontractor availability. However, NCI has not identified any aspect of the regulations that requires such separation. Indeed, as the district court observed, the regulations require the local goal to be focused on overall DBE participation in the recipient’s DOT-assisted contracts. See 49 C.F.R. § 26.45(a)(1). It would make little sense to separate prime contractor and subcontractor availability as suggested by NCI when DBEs will also compete for prime contracts and any success will be reflected in the recipient’s calculation of success in meeting the overall goal. [Northern Contracting, Inc. v. Illinois DOT, 473 F.3d 715, 723 (7<sup>th</sup> Cir. 2007)]<sup>25</sup>

Also, several courts have accepted the use of a “custom census” methodology for calculating availability. For example, in Northern Contracting, after identifying the relevant geographic market and product market (transportation construction) the analyst “surveyed Dun & Bradstreet’s *Marketplace*, which is a comprehensive database of American businesses that identifies which businesses are minority or women-owned. Wainwright supplemented this survey with IDOT’s list of DBEs in Illinois.”<sup>26</sup> In Kossman, for example, the consulting analyst “relied on data acquired from Dun & Bradstreet’s Hoovers subsidiary on the total number of businesses in the defined market area. . . . Because the Dun & Bradstreet data did not adequately identify all MWBEs, NERA collected information on MWBEs in Texas and surrounding states

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since it represents “a ready source of information regarding the identity of the firms which are qualified to provide contracting services as prime contractors.” Id.

<sup>23</sup> 615 F.3d at 244.

<sup>24</sup> 713 F.3d at 1191-92. Cf. Engineering Contractors v. Metropolitan Dade, 122 F.3d 895 (when special qualifications are necessary to undertake a particular task, the relevant statistical pool must include only those minority-owned firms qualified to provide the requested services).

<sup>25</sup> See Associated General Contractors v. California D.O.T., 713 F.23d at 1199 (citing Northern Contracting); Kossman, at 58 (“Separately considering prime contractors and subcontractors is not only unnecessary but may be misleading. The anecdotal evidence indicates that construction firms had served, on different contracts, as both.”). See also H.B.Rowe, 615 F.3d at 245 (court accepted combined data based on experts’ explanation that prime contractors are also qualified to do subcontracting work, and often do).

<sup>26</sup> 473 F.3d at 718.



through lists from public and private entities, as well as prior NERA studies, and culled records for MBEs within the [City's] defined market area.”<sup>27</sup>

c) Utilization

Utilization is a natural corollary to availability, in terms of statistical calculation. Different courts have applied utilization rates to different base measures, including percentage-based analyses regarding contract awards and dollars paid.

For example, in H.B. Rowe, the state demonstrated statistical disparity using subcontracting dollars won by minority subcontractors.<sup>28</sup> In Associated General Contractors v. California D.O.T., the State's disparity study consultants calculated the percentage of contracting dollars that were paid to DBE firms.<sup>29</sup> This is referred to as the rate of utilization. From this point, one could determine if a disparity exists and, if so, to what extent.

In Cone Corp. v. Hillsborough County, 908 F.3d 908 (11th Cir. 1990), the following utilization statistics were developed and presented to justify an MBE program:

The County documented the disparity between the percentage of MBE contractors in the area and the percentage of contracts awarded to those MBE contractors. Hillsborough County determined that the percentage of County construction dollars going to MBE contractors compared to the total percentage of County construction dollars spent. . . . The data extracted from the studies indicates that while 10% of the businesses and twelve percent of the contractors in the County were minorities, only 7.89% of the County purchase orders, 1.22% of the County purchase dollars, 6.3% of the awarded bids, and 6.5% of the awarded dollars went to minorities. The statistical disparities between the total percentage of minorities involved in construction and the work going to minorities, therefore, varied from approximately four to 10%, with a glaring 10.78% disparity between the percentage of minority contractors in the County and the percentage of County construction dollars awarded to minorities. Such a disparity clearly constitutes a prima facie case of discrimination indicating that the racial classification in the County plan were necessary. [Id. at 915-16]

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<sup>27</sup> Id. at 5. See also Midwest Fence Corp. v. U.S. D.O.T., 840 F.3d 932, 950 (7th Cir. 2016)(discussing and approving custom census method).

<sup>28</sup> 615 F.3d at 241, 250-51 (“[A] state may meet its burden by relying on ‘a significant statistical disparity’ between the availability of qualified, willing, and able minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors.”), citing Croson, 488 U.S. at 509, 109 S.Ct. 706.

<sup>29</sup> 713 F.2d at 1191-1193. In Kossman v. City of Houston, NERA used both “award amounts” and “paid amounts” to determine utilization. Id. at 3, n. 10. The court, in approving the statistical proffer, looked only at the award amounts to “simplify matters.” Id.

#### d) Disparity Indices

Once the statistical data has been collected and preliminarily assessed, further analysis must be done to evaluate whether any disparity identified is statistically significant. Reviewing courts have approved the use of disparity indices and standard deviations for this purpose, and GSPC will be utilizing them in the present Disparity Study.

One way to demonstrate the under-utilization of M/WBEs (or DBEs) in a particular area is to employ a statistical device known as the “disparity index.” The use of such an index was explained, and cited approvingly, in H.B. Rowe, 615 F.3d at 243-44. In that case, after noting the increasing use of disparity indices, the court explained that the State (through a consulting firm) calculated a disparity index for each relevant racial or gender group covered by the DBE program, and further, conducted a standard deviation analysis on each of those indices using t-tests.<sup>30</sup> The resulting calculations “demonstrated marked underutilization of [] African American and Native American subcontractors,” according to the court.<sup>31</sup>

The utility of disparity indices or similar measures to examine the utilization of minorities or women in a particular industry has been recognized by a number of federal circuit courts.<sup>32</sup> Specifically, courts have used these disparity indices to apply the “strong basis in evidence” standard in Croson. As noted, the disparity index in H.B. Rowe was 0.46 for African Americans, and was 0.48 for Native Americans.<sup>33</sup> Based on a disparity index of 0.22, the Ninth Circuit upheld the denial of a preliminary injunction to a challenger of the City of San Francisco’s MBE plan based upon an equal protection claim.<sup>34</sup> Similarly, the Third Circuit held that a disparity of 0.04 was “probative of discrimination in City contracting in the Philadelphia construction industry.”<sup>35</sup>

#### e) Standard Deviations

The number calculated via the disparity index (established above) is then tested for its validity through the application of a standard deviation analysis. Standard deviation analysis measures the probability that a result is a random deviation from the predicted result (the more standard deviations, the lower the probability the result is a random one). Social scientists consider a finding of two standard deviations significant, meaning that there is about one chance in 20 that the explanation for the deviation could be random, so the deviation must be accounted for by some factor.

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<sup>30</sup> Id. at 244. The disparity index is calculated by dividing the percentage of available M/WBE participation (amount of contract dollars) by the percentage of M/WBEs in the relevant population of local firms. A disparity index of one (1.0) demonstrates full M/WBE participation, whereas the closer the index is to zero, the greater the under-utilization. Some courts multiply the disparity index by 100, thereby creating a scale between 0 and 100, with 100 representing full utilization. Engineering Contractors, 122 F.3d at 914.

<sup>31</sup> Id.

<sup>32</sup> See Associated General Contractors v. California D.O.T., 713 F.2d at 1191, citing H.B. Rowe; Concrete Works, 36 F.3d at 1523 n. 10 (10th Cir.1994) (employing disparity index); Contractors Ass’n, 6 F.3d at 1005 (3d Cir.1993) (employing disparity index).

<sup>33</sup> Id. at 245.

<sup>34</sup> AGC v. Coal. for Economic Equity, 950 F.2d 1401, 1414 (9th Cir. 1991).

<sup>35</sup> Contractors Ass’n, 6 F.3d at 1005.



As noted above, standard deviations were applied by the State of North Carolina in the statistical analysis utilized to defend its M/WBE program in H.B. Rowe.<sup>36</sup> The Fourth Circuit described the significance of the findings as follows:

For African Americans the t-value of 3.99 fell outside of two standard deviations from the mean and, therefore, was statistically significant at a 95% confidence level. In other words, there was at least a 95% probability that prime contractors' underutilization of African American subcontractors was not the result of mere chance. For Native American subcontractors, the t-value of 1.41 was significant at a confidence level of approximately 85%. [Id. at 245]

Similarly, the Eleventh Circuit has directed that “where the difference between the expected value and the observed number is greater than two or three standard deviations’, then the hypothesis that [employees] were hired without regard to race would be suspect.” Peightal v. Metropolitan Dade County, 26 F.3d 1545, 1556 (11th Cir. 1994) (quoting Castaneda v. Partida, 430 U.S. 482, 497 n.17, 97 S.Ct. 1272, 1281 n.17, (1977)).

#### f) Regression Analyses

In conducting its statistical analysis of the City of Frederick DBE Program, GSPC will also be employing a regression analysis, which essentially seeks to control for numerous factors *other than discrimination, e.g.*, firm size, experience level, which may be causing or contributing to any disparity identified. This aspect of the GSPC methodology likewise has the support of several courts as a current “best practice” for disparity studies.

For example, after the Fourth Circuit in H.B. Rowe noted the statistical significance of certain quantitative analyses showing two standard deviations or a disparity ratio higher than .80, it addressed the value of a regression analysis as a further evaluative tool. Specifically, in discussing the disparity evidence offered by the State, the court favorably noted:

To corroborate the disparity data, MGT conducted a regression analysis studying the influence of certain company and business characteristics - with a particular focus on owner race and gender - on a firm's gross revenues. MGT obtained the data from a telephone survey of firms that conducted or attempted to conduct business with the Department. The survey pool consisted of a random sample of 647 such firms; of this group, 627 participated in the survey.

MGT used the firms' gross revenues as the dependent variable in the regression analysis to test the effect of other variables, including company age and number of full-time employees, and the owners' years of experience, level of education, race, ethnicity, and gender. The analysis revealed that minority and women ownership universally had a negative effect on revenue. African American ownership of a firm had the largest negative effect on that firm's gross revenue of all the independent variables included in the regression model. These findings led MGT to conclude that “for African Americans, in

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<sup>36</sup> 615 F.3d at 244-45.

particular, the disparity in firm revenue was not due to capacity-related or managerial characteristics alone.” [Id. at 245-46; 250]

In Kossman v. City of Houston, the key feature of the supporting study was an analysis addressing business formation, earnings, and capital markets.<sup>37</sup> Using both statistical and anecdotal evidence, the study ultimately concluded that “business discrimination against M/WBEs existed in the geographic and industry markets for [the City’s] awarding of construction contracts”:

[W]e conclude that there is strong evidence of large, adverse, and frequently statistically significant disparities between minority and female participation in business enterprise activity in [Defendant’s] relevant market area and the actual current availability of those businesses. **We further conclude that these disparities cannot be explained solely, or even primarily, by difference between M/WBE and non-M/WBE business populations in factors untainted by discrimination, and that these differences therefore give rise to a strong inference of the continued presence of discrimination in [Defendant’s] market area.** There is also strong anecdotal evidence of continuing barriers to the full and fair participation of M/WBEs on [Defendant] contracts and subcontracts, despite the implementation of the M/W/SBE Program, and in the wider Houston construction economy. Remedial efforts remain necessary to ensure that Houston does not function as a passive participant in discrimination. [Kossman, at p. 11 (emphasis added)]

#### 6. Requirement for a Narrowly-Tailored Remedy

Under the Croson framework, any race-conscious plan or remedy must also be narrowly tailored to ameliorate the effects of past discrimination on (and only on) the protected groups identified as significantly underutilized in the study. See Michigan Road Builders Ass’n v. Milliken, 834 F.2d 583, 589-90 (6th Cir. 1987).<sup>38</sup>

The Fourth Circuit addressed the parameters of this requirement in Tuttle v. Arlington County:

When reviewing whether a state racial classification is narrowly tailored, we consider factors such as: (1) the efficacy of alternative race-neutral policies, (2) the planned duration of the policy, (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population or work force, (4) the flexibility of the policy, including the provision of waivers if the goal cannot be met, and (5) the burden of the policy on innocent third parties. [195 F.3d at 706 (citation omitted)]<sup>39</sup>

Similar guideposts are provided in several post-Croson cases addressing or evaluating efforts to meet the “narrowly tailored” prong – which we simply list for ease of reference:

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<sup>37</sup> Id. at pp. 2-10.

<sup>38</sup> See also Sherbrooke Turf, 345 F.3d at 972 (citing Croson, 488 U.S. at 496).

<sup>39</sup> See also Croson, 488 U.S. at 507-08. See also Sherbrooke Turf, 345 F.3d at 971-72 (“Narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, but it does require serious, good faith consideration of workable race-neutral alternatives.”); Adarand III, at 1177.

- Relief is limited to minority groups for which there is identified discrimination;
- Remedies are limited to redressing the discrimination within the boundaries of the enacting jurisdiction;
- The goals of the programs should be flexible and provide waiver provisions;
- Race and/or gender neutral measures should be considered to the extent reasonably possible; and
- The program should include provisions or mechanisms for periodic review and sunset.<sup>40</sup>

Inherent in the above discussion is the notion that M/WBE programs and remedies must maintain flexibility with regard to local conditions in the public and private sectors. Courts have suggested project-by-project goal setting and waiver provisions as means of ensuring fairness to all vendors.

Also, “review” or “sunset” provisions are strongly suggested components for an M/WBE program to guarantee that remedies do not out-live their intended remedial purpose. As an example, the Fourth Circuit had little problem rejecting a challenged college scholarship program because it had no “sunset” provision.<sup>41</sup> In contrast, in H.B. Rowe, the court specifically noted with approval the mandatory review and sunset provisions included in the relevant North Carolina statute (§ 136-28.4).<sup>42</sup>

## CONCLUSION

The Croson decision, handed down thirty years ago, continues to cast a long shadow over M/WBE and DBE programs and legislation. Significant refinement by the Supreme Court and the federal Circuit Courts of Appeal transpired in its wake, though, addressing the acceptable and proper methodologies for achieving the legal standards established by Croson.

In fact, the Court in Kossman recently included in its opinion a lengthy legal overview of what it dubbed “Croson’s Continuing Significance.” In this section of its decision, the court opined about why a statistical analysis like that presented by the City of Houston was necessary and proper under the Equal Protection scheme established by Croson and refined by its (continuing) progeny.<sup>43</sup> In many respects, this opinion provides a roadmap for success in implementing and defending an M/WBE or DBE program (such as the City of Frederick’s DBE Program) under the current state of the law, with appropriate attribution and reference to Croson.

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<sup>40</sup> Sherbrooke Turf, 345 F.3d at 971 (“In determining whether a race-conscious remedy is narrowly tailored, we look to factors such as the efficacy of alternative remedies, the flexibility and duration of the race-conscious remedy, the relationship of the numerical goals to the relevant labor market, and the impact of the remedy on third parties.”).

<sup>41</sup> Podberesky, 38 F.3d at 160 (“The program thus could remain in force indefinitely based on arbitrary statistics unrelated to constitutionally permissible purposes.”).

<sup>42</sup> 615 F.3d at 239.

<sup>43</sup> Id. at pp. 34-49, and 53-62.

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Wygant v. Jackson Bd. of Educ., 476 U.S. 267 (1986)

U.S. Const. art. III, § 2, cl. 1

U.S. Const. amend. XIV, § 1

## APPENDIX C

### City of Frederick Disparity Study Data Assessment Report

## CITY OF FREDERICK, MARYLAND

### 2020 DISPARITY STUDY

### DATA ASSESSMENT REPORT

Griffin & Strong, P.C. (“GSPC”) conducted data assessment meetings on March 3, 2020 at the City of Frederick (“City”) offices in Frederick Maryland. This report summarizes this meeting and sets forth action items and preliminary questions to be answered. It is necessary to issue a data assessment report prior to completing the data collection plan in order to confirm that GSPC has the correct understanding of how and where data is kept by the City. All data and data requests will be submitted to the City through Katie Barkdoll, Director of Budget and Purchasing.

#### I. Scope Statement

The purpose of this disparity study (“Study”) is to evaluate the existence of discrimination in City contracting. In addition, the Study will independently assess current and proposed minority and women owned business enterprise programs, policies, and procedures.

The Study will collect and analyze relevant data on “ready, willing and able” vendors in the areas of:

1. Construction
2. Construction related Professional Services
3. Professional Services
4. Other Services
5. Goods

The study period for the disparity study was determined as a five-year study period FY2014-FY2018.

The dollars spent will be collected and analyzed from all City departments. The airport is federally funded and will be included as well. Delta Consultants is the aviation consultant. (Patty Slumber will provide the report).

The only outlier is the Weinberg Center for the Arts, a non-profit operation which run through the City’s books, but does not run through the City’s procurement. These will be excluded based on the department indicator which exists in the general ledger codes.

## II. Preliminary Purchasing Practices

### A. Contract Thresholds

1. Informal Threshold: Under \$10,000
2. Informal Threshold (with written quotes): \$10,000 to \$49,999.99
3. Formal Threshold: \$50,000 and over is a formal purchase and goes before the Board of Alderman for approval.

## III. Data Assessment

### A. General Data

The City uses 5-digit NIGP codes that are assigned by the requesting department in Innoprise. There is no strict governance on the use of the codes among City staff.

### B. Specific Data files

It was determined in this meeting that GSPC will need from the City:

- Solicitations (Study Period)
- Vendor List (Current)
- Supplier List (Current)
- P.O.'s (Study Period)
- Payments (Study Period)
- Contracts (Study Period)
- Check Requests (Study Period)
- P-cards (Excluded from the Study)
- Bidders (Study Period)
- Subcontractor data (Study Period)
- Certified Lists (Current)
- Airport DBE data (Study period)

#### 1. Solicitations

Formal solicitations are maintained by the County and are in a scanned electronic format. Formal solicitations have a number that should be referenced throughout the



procurement process (unsure). There is no master list of solicitations and not every purchase has a requisition.

## 2. Vendor Lists

Innoprise is the primary system storing vendors. This is the financial system and will pick up firms that were registered and entered into the system from a physical record. This is an inward facing system and firms have to be in the vendor system in order to get paid. Vendors will have vendor numbers. There are some commodity codes for vendors in Innoprise, but very few.

## 3. Supplier List

Supplier is a new outward facing, self-identifying, vendor registration system. Because it has only been used since this year it has considerably less data. It is more likely to have street addresses, but it is only about a tenth of the size of the Vendor List.

## 4. Purchase Orders (POs)

Purchase Orders compose most of the payment data for the City. They should show both the award amount (encumbrance) and the amount paid so far. These are stored in the Innoprise system and contain PO Numbers as the unique identifier. It should be noted that PO's are not the universe of all purchases. There is data mixed in with the POs that will not have a PO Number. These are check requests. Additionally, there are Contract Numbers available in Innoprise but these are loosely maintained.

When a PO is amended, the PO will not contain negative line-item amounts. Instead, the City went back and changed the original PO payment value. The date associated with the PO will update to reflect this. Because of this, the fiscal year embedded in the PO number will be a crucial identifier to verify data is within the study period. The first two digits of a PO Number indicate the year the PO was created.

Purchase orders include NIGP codes but are not always entered. They also include Project numbers which will help to identify intergovernmental purchases and grants.

## 5. Payment Data<sup>1</sup> (may not need)

Purchase Order include amounts paid so far on an award. But the individual payments have GL Codes with Object Codes included. Purchase Orders may provide sufficient data, but the

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<sup>1</sup> Note that Purchase Orders and Payments come out of the same system.

Object Codes would be very useful for GSPC, if there are missing NIGP codes in POs. Payments do include PO numbers if there is one. They also include GL Codes with Object codes included and project codes which is how capital projects are tracked.

Payments will sometimes tell you the source of funds, but it will not be reliable because it can only represent one of many sources to fund a payment.

## 6. Contracts

If there is a contract the contract number should be in the PO file.

## 7. Check Requests

Check request data is also stored in Innoprise and is mixed in with all PO payment data. Anything without a PO Number is a check request. These will broadly describe direct spending for things like IT purchases, registration fees, and health insurance fees (e.g. Cigna is not on a PO.)

## 8. P-Cards

Not included in the Study. Limited to \$500 per purchase/\$2500 per month. Can be adjusted for approvals.

## 9. Bidders

Bidders did not need to be registered until FY 19 when a requirement to register was introduced with the movement to "E-Procurement". The City has physical copies of bid tabs for the past five years. (May not be everyone but substantially all). There are 25-30 bids per year with formal solicitations, not including piggybacks.

These documents have been electronically scanned.

## 10. Subcontractors

There is no requirement to use subcontractors, but if they are used, they must be listed in a hard copy bid. A filing system by year contains formal bids which have subcontractors. Bids from 2016 to now have been scanned.

The DBE Committee compiled MWBE Subcontractors from 2013-2018 in an excel spreadsheet documents just on formal solicitations. 2019 data exists physically but has

not been entered into the spreadsheet.

#### 11. Certified List

The City does not have a local certification. Frederick County does have a certified/uncertified list.

#### 12. Airport DBE data

The airport reports DBE participation on its federally funded projects. This reporting is done by the City's aviation consultant and will be separately requested.

### IV. Special Notes

1. Data Outliers. Of special interest may be that the City does not generally do very large capital projects. But during the Study Period, a \$50M E&R upgrade to wastewater treatment was done by a Vermont firm.

Also, a minority firm based in Washington, D.C did a \$25M road construction project about 2 years ago.

2. Uncertified MWBE firms. There is a computer firm, CSP, which is a local woman owned firm, but is not certified.

SHI is a minority owned national firm that is not certified.

Jason Lee owns a janitorial business. He is a minority but not certified. He also doesn't do any work with the City.

3. Call public hearings, public meetings instead. Public hearings are something specific in Frederick.
4. Frederick County has an MWBE specialist in the Office of Economic Development. Katie will connect us.

# APPENDIX D

## City of Frederick Disparity Study Threshold Analysis

## APPENDIX D– Formal Award Thresholds

GSPC reviewed the level of contracting undertaken by the City at various dollar thresholds in order to determine whether it was likely that all firms in its Master Vendor File could perform as prime contractors. In every category the median suggests a substantial number of small awards where firms that have traditionally participated only as subcontractors would have the capacity to perform as prime contractors. Fifty percent of all formal awards were less than \$247,520.

Table D-1  
Formal Award Thresholds – All Industry Categories (Prime)  
Based on Formal Award Dollars in the Study Period (FY 2014 – FY 2018)  
City of Frederick Disparity Study

Award Threshold	Number of Awards	Percent of Awards	Dollars	Percent of Dollars
1,000 to 5,000	0	0.00%	\$0.00	0.00%
5,000.01 to 10,000	0	0.00%	\$0.00	0.00%
10,000.01 to 50,000	0	0.00%	\$0.00	0.00%
50,000.01 to 100,000	22	28.21%	\$1,575,347.98	1.35%
100,000.01 to 250,000	19	24.36%	\$3,156,521.74	2.70%
250,000.01 to 500,000	13	16.67%	\$4,185,813.10	3.59%
500,000.01 to 750,000	4	5.13%	\$2,426,070.28	2.08%
750,000.01 to 1,000,000	3	3.85%	\$2,758,350.00	2.36%
1,000,000.01 to 1,500,000	5	6.41%	\$6,455,576.26	5.53%
1,500,000.01 to 2,000,000	3	3.85%	\$5,628,750.01	4.82%
2,000,000.01 to 2,500,000	1	1.28%	\$2,148,957.00	1.84%
2,500,000.01 to 5,000,000	5	6.41%	\$19,736,523.85	16.91%
Over 5,000,000	3	3.85%	\$68,660,811.40	58.82%
Total	78	100.00%	\$116,732,721.62	100.00%
Average			Median	
\$1,496,573.35			\$247,520.00	

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In Construction, there are 29 formal awards made in the study period which account for for 86.38% of all award dollars.

Table D-2  
**Formal Award Thresholds – Construction (Prime)**  
 Based on Formal Award Dollars in the Study Period (FY 2014 – FY 2018)  
 City of Frederick Disparity Study

Award Threshold	Number of Awards	Percent of Awards	Dollars	Percent of Dollars
1,000 to 5,000	0	0.00%	\$0.00	0.00%
5,000.01 to 10,000	0	0.00%	\$0.00	0.00%
10,000.01 to 50,000	0	0.00%	\$0.00	0.00%
50,000.01 to 100,000	3	10.34%	\$261,796.54	0.26%
100,000.01 to 250,000	4	13.79%	\$593,874.44	0.59%
250,000.01 to 500,000	6	20.69%	\$1,925,442.10	1.91%
500,000.01 to 750,000	2	6.90%	\$1,319,840.00	1.31%
750,000.01 to 1,000,000	1	3.45%	\$978,207.00	0.97%
1,000,000.01 to 1,500,000	3	10.34%	\$3,651,990.00	3.62%
1,500,000.01 to 2,000,000	2	6.90%	\$3,703,750.01	3.67%
2,000,000.01 to 2,500,000	0	0.00%	\$0.00	0.00%
2,500,000.01 to 5,000,000	5	17.24%	\$19,736,523.85	19.57%
Over 5,000,000	3	10.34%	\$68,660,811.40	68.09%
Total	29	100.00%	\$100,832,235.34	100.00%
Average			Median	
\$3,476,973.63			\$745,000.00	

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In Architecture & Engineering, there are 11 formal awards in the study period with 50% of awards being \$179,200 or less. The largest award composes 42.70% of all awards in this category.

Table D-3  
**Formal Award Thresholds – Architecture & Engineering (Prime)**  
 Based on Formal Award Dollars in the Study Period (FY 2014 – FY 2018)  
 City of Frederick Disparity Study

Award Threshold	Number of Awards	Percent of Awards	Dollars	Percent of Dollars
1,000 to 5,000	0	0.00%	\$0.00	0.00%
5,000.01 to 10,000	0	0.00%	\$0.00	0.00%
10,000.01 to 50,000	0	0.00%	\$0.00	0.00%
50,000.01 to 100,000	3	27.27%	\$210,524.19	6.46%
100,000.01 to 250,000	4	36.36%	\$698,981.00	21.46%
250,000.01 to 500,000	3	27.27%	\$956,622.00	29.37%
500,000.01 to 750,000	0	0.00%	\$0.00	0.00%
750,000.01 to 1,000,000	0	0.00%	\$0.00	0.00%
1,000,000.01 to 1,500,000	1	9.09%	\$1,390,541.00	42.70%
1,500,000.01 to 2,000,000	0	0.00%	\$0.00	0.00%
2,000,000.01 to 2,500,000	0	0.00%	\$0.00	0.00%
2,500,000.01 to 5,000,000	0	0.00%	\$0.00	0.00%
Over 5,000,000	0	0.00%	\$0.00	0.00%
Total	11	100.00%	\$3,256,668.19	100.00%
Average			Median	
\$296,060.74			\$179,200.00	

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In Professional Services, there are 11 formal awards in the study period with 50% of the awards are less than \$227,800.00.

Table D-4  
**Formal Award Thresholds – Professional Services (Prime)**  
 Based on Formal Award Dollars in the Study Period (FY 2014 – FY 2018)  
 City of Frederick Disparity Study

Award Threshold	Number of Awards	Percent of Awards	Dollars	Percent of Dollars
1,000 to 5,000	0	0.00%	\$0.00	0.00%
5,000.01 to 10,000	0	0.00%	\$0.00	0.00%
10,000.01 to 50,000	0	0.00%	\$0.00	0.00%
50,000.01 to 100,000	3	27.27%	\$193,350.00	2.81%
100,000.01 to 250,000	3	27.27%	\$478,000.00	6.95%
250,000.01 to 500,000	2	18.18%	\$715,200.00	10.41%
500,000.01 to 750,000	0	0.00%	\$0.00	0.00%
750,000.01 to 1,000,000	0	0.00%	\$0.00	0.00%
1,000,000.01 to 1,500,000	1	9.09%	\$1,413,045.26	20.56%
1,500,000.01 to 2,000,000	1	9.09%	\$1,925,000.00	28.01%
2,000,000.01 to 2,500,000	1	9.09%	\$2,148,957.00	31.26%
2,500,000.01 to 5,000,000	0	0.00%	\$0.00	0.00%
Over 5,000,000	0	0.00%	\$0.00	0.00%
Total	11	100.00%	\$6,873,552.26	100.00%
Average		Median		
\$624,868.39		\$227,800.00		

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In Other Services, 50% of all formal awards are \$200,758.03 or less. There were no awards over \$1 million in this category.

Table D-5  
**Formal Award Thresholds – Other Services (Prime)**  
 Based on Formal Award Dollars in the Study Period (FY 2014 – FY 2018)  
 City of Frederick Disparity Study

Award Threshold	Number of Awards	Percent of Awards	Dollars	Percent of Dollars
1,000 to 5,000	0	0.00%	\$0.00	0.00%
5,000.01 to 10,000	0	0.00%	\$0.00	0.00%
10,000.01 to 50,000	0	0.00%	\$0.00	0.00%
50,000.01 to 100,000	12	52.17%	\$841,757.25	18.23%
100,000.01 to 250,000	7	30.43%	\$1,135,705.30	24.60%
250,000.01 to 500,000	1	4.35%	\$300,349.00	6.50%
500,000.01 to 750,000	1	4.35%	\$559,480.07	12.12%
750,000.01 to 1,000,000	2	8.70%	\$1,780,143.00	38.55%
1,000,000.01 to 1,500,000	0	0.00%	\$0.00	0.00%
1,500,000.01 to 2,000,000	0	0.00%	\$0.00	0.00%
2,000,000.01 to 2,500,000	0	0.00%	\$0.00	0.00%
2,500,000.01 to 5,000,000	0	0.00%	\$0.00	0.00%
Over 5,000,000	0	0.00%	\$0.00	0.00%
Total	23	100.00%	\$4,617,434.62	100.00%
Average		Median		
\$200,758.03		\$100,000.00		

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In Goods & Supplies, there were only 4 formal awards in the study period. No award was over \$1 million with the largest award composing 47.23% of all dollars in this category.

Table D-6  
*Formal Award Thresholds – Goods & Supplies (Prime)*  
 Based on Formal Award Dollars in the Study Period (FY 2014 – FY 2018)  
 City of Frederick Disparity Study

Award Threshold	Number of Awards	Percent of Awards	Dollars	Percent of Dollars
1,000 to 5,000	0	0.00%	\$0.00	0.00%
5,000.01 to 10,000	0	0.00%	\$0.00	0.00%
10,000.01 to 50,000	0	0.00%	\$0.00	0.00%
50,000.01 to 100,000	1	25.00%	\$67,920.00	5.89%
100,000.01 to 250,000	1	25.00%	\$249,961.00	21.68%
250,000.01 to 500,000	1	25.00%	\$288,200.00	25.00%
500,000.01 to 750,000	1	25.00%	\$546,750.21	47.43%
750,000.01 to 1,000,000	0	0.00%	\$0.00	0.00%
1,000,000.01 to 1,500,000	0	0.00%	\$0.00	0.00%
1,500,000.01 to 2,000,000	0	0.00%	\$0.00	0.00%
2,000,000.01 to 2,500,000	0	0.00%	\$0.00	0.00%
2,500,000.01 to 5,000,000	0	0.00%	\$0.00	0.00%
Over 5,000,000	0	0.00%	\$0.00	0.00%
Total	4	100.00%	\$1,152,831.21	100.00%
Average		Median		
\$288,207.80		\$269,080.50		

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## APPENDIX E

### City of Frederick Disparity Study Utilization and Disparity Analysis Using Payments

## APPENDIX E– Prime Utilization and Disparity using Payments

The tables in this Appendix E represent the Prime Contractor Payments and the resulting disparity analysis in the Relevant Market.<sup>1</sup> GSPC also produced an analysis based upon formal awards over \$50,000. Since that analysis did not include awards under \$50,000, GSPC supplemented that analysis by analysing the disparity of all payments. As noted in Table E-2, there was statistically significant underutilization in all MWBE categories in the city’s prime contracting, except for Asian American owned firms in Construction. Women were underutilized, but it was not statistically significant.

### 1. Prime Utilization Summary – Payments

Table E-1  
*Disparity Indices – Construction (Prime)*  
In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	Construction		Architecture & Engineering		Professional Services		Other Services		Goods & Supplies	
	\$	%	\$	%	\$	%	\$	%	\$	%
African American	\$0	0.00%	\$0	0.00%	\$3,726	0.01%	\$88,055	0.51%	\$6,841	0.03%
Asian American	\$11,752,224	12.17%	\$750	0.01%	\$50,000	0.13%	\$7,380	0.04%	\$0	0.00%
Hispanic American	\$6,600	0.01%	\$0	0.00%	\$0	0.00%	\$86,933	0.51%	\$0	0.00%
Native American	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%
Total MBE	\$11,758,824	12.18%	\$750	0.01%	\$53,726	0.14%	\$182,368	1.06%	\$6,841	0.03%
Women	\$5,997,118	6.21%	\$464,055	6.68%	\$20,060	0.05%	\$192,170	1.12%	\$494,168	2.19%
Total MWBE	\$17,755,942	18.39%	\$464,805	6.69%	\$73,786	0.19%	\$374,539	2.18%	\$501,009	2.22%
Non-MWBE	\$78,783,617	81.61%	\$6,478,631	93.31%	\$37,821,114	99.81%	\$16,807,807	97.82%	\$22,036,792	97.78%
Total	\$96,539,559	100.00%	\$6,943,436	100.00%	\$37,894,900	100.00%	\$17,182,345	100.00%	\$22,537,802	100.00%

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<sup>1</sup> The same availability measurement was used as that demonstrated for the awards analysis. (See Appendix I)

## 2. Prime Disparity Summary – Payments

Table E-2  
*Disparity Indices – Construction (Prime)*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
 City of Frederick Disparity Study

Race/Ethnicity	Construction	Architecture & Engineering	Professional Services	Other Services	Goods & Supplies
African American	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.03 <sup>a</sup>	0.0 <sup>a</sup>
Asian American	3.49 <sup>c</sup>	0.0 <sup>a</sup>	0.04 <sup>a</sup>	0.01 <sup>a</sup>	0.0 <sup>a</sup>
Hispanic American	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.18 <sup>a</sup>	0.0 <sup>a</sup>
Native American	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>	0.0 <sup>a</sup>
Total MBE	0.36 <sup>a</sup>	0.0 <sup>a</sup>	0.01 <sup>a</sup>	0.05 <sup>a</sup>	0.0 <sup>a</sup>
Women	0.83	0.75 <sup>a</sup>	0.01 <sup>a</sup>	0.2 <sup>a</sup>	0.51 <sup>a</sup>
Total MWBE	0.44 <sup>a</sup>	0.17 <sup>a</sup>	0.01 <sup>a</sup>	0.07 <sup>a</sup>	0.14 <sup>a</sup>
Non-MWBE	1.39 <sup>c</sup>	1.56 <sup>c</sup>	1.46 <sup>c</sup>	1.38 <sup>c</sup>	1.16 <sup>c</sup>

### Legend

Significant Disparity (Disparity Percentage Below 80%)

<sup>a</sup> Statistically Significant Underutilization (Confidence interval of 95% and probability error of less than 5%)

Disparity (Disparity Percentage 80% to 99.9%)

<sup>b</sup>Very small number to produce statistical significance

Overutilized (Disparity Percentage over 100%)

<sup>c</sup> Overutilized and Disparity Percentage of 100% or greater.

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# APPENDIX F

## City of Frederick Disparity Study Detailed Disparity Analysis Using Awards

## APPENDIX F – Detailed Prime and Total Utilization (Prime + Subcontractor) Disparities using Awards

The tables in Appendix F (Tables F-1 through F-9) presents detailed disparity ratios on North Carolina projects by year over the Study Period based on awards. The summary of these disparity ratios is in the Quantitative Analysis chapter.

### 1. Prime Disparity Indices - Awards

Table F-1

#### *Disparity Indices – Construction (Prime)*

In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	0.00%	3.49%	0	Underutilization	p<.05
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	0.00%	33.56%	0	Underutilization	p<.05
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	0.00%	41.48%	0	Underutilization	p<.05
	Non-MWBE	100.00%	58.52%	1.71	Overutilization	
2015	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	0.00%	3.49%	0	Underutilization	p<.05
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	0.00%	33.56%	0	Underutilization	p<.05
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	0.00%	41.48%	0	Underutilization	p<.05
	Non-MWBE	100.00%	58.52%	1.71	Overutilization	
2016	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	73.91%	3.49%	21.18	Overutilization	
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	73.91%	33.56%	2.2	Overutilization	
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	73.91%	41.48%	1.78	Overutilization	
	Non-MWBE	26.09%	58.52%	0.45	Underutilization	p<.05
2017	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	0.00%	3.49%	0	Underutilization	p<.05
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	0.00%	33.56%	0	Underutilization	p<.05
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	0.00%	41.48%	0	Underutilization	p<.05
	Non-MWBE	100.00%	58.52%	1.71	Overutilization	
2018	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	0.00%	3.49%	0	Underutilization	p<.05
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	0.00%	33.56%	0	Underutilization	p<.05
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	0.00%	41.48%	0	Underutilization	p<.05
	Non-MWBE	100.00%	58.52%	1.71	Overutilization	
Study Period	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	29.01%	3.49%	8.31	Overutilization	
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	29.01%	33.56%	0.86	Underutilization	p<.05
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	29.01%	41.48%	0.7	Underutilization	p<.05
	Non-MWBE	70.99%	58.52%	1.21	Overutilization	

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Table F-2  
*Disparity Indices – Architecture & Engineering (Prime)*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
 City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.00%	14.00%	0	Underutilization	Small Number
	Asian American	0.00%	12.00%	0	Underutilization	Small Number
	Hispanic American	0.00%	3.43%	0	Underutilization	Small Number
	Native American	0.00%	1.14%	0	Underutilization	Small Number
	Total MBE	0.00%	30.57%	0	Underutilization	Small Number
	Women	0.00%	8.86%	0	Underutilization	Small Number
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	Small Number
	Total MWBE	0.00%	40.00%	0	Underutilization	Small Number
2015	Non-MWBE	0.00%	60.00%	0	Underutilization	Small Number
	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	0.00%	12.00%	0	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	0.00%	30.57%	0	Underutilization	p<.05
	Women	14.11%	8.86%	1.59	Overutilization	
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
2016	Total MWBE	14.11%	40.00%	0.35	Underutilization	p<.05
	Non-MWBE	85.89%	60.00%	1.43	Overutilization	
	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	0.00%	12.00%	0	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	0.00%	30.57%	0	Underutilization	p<.05
	Women	0.00%	8.86%	0	Underutilization	p<.05
2017	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	0.00%	40.00%	0	Underutilization	p<.05
	Non-MWBE	100.00%	60.00%	1.67	Overutilization	
	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	0.00%	12.00%	0	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	0.00%	30.57%	0	Underutilization	p<.05
2018	Women	34.17%	8.86%	3.86	Overutilization	
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	34.17%	40.00%	0.85	Underutilization	p<.05
	Non-MWBE	65.83%	60.00%	1.1	Overutilization	
	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	0.00%	12.00%	0	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
Study Period	Total MBE	0.00%	30.57%	0	Underutilization	p<.05
	Women	0.00%	8.86%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	0.00%	40.00%	0	Underutilization	p<.05
	Non-MWBE	100.00%	60.00%	1.67	Overutilization	
	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	0.00%	12.00%	0	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	0.00%	30.57%	0	Underutilization	p<.05
	Women	15.59%	8.86%	1.76	Overutilization	
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	15.59%	40.00%	0.39	Underutilization	p<.05
	Non-MWBE	84.41%	60.00%	1.41	Overutilization	

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Table F-3  
*Disparity Indices - Professional Services (Prime)*  
In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	0.00%	3.30%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	0.00%	25.34%	0	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	0.00%	31.59%	0	Underutilization	p<.05
	Non-MWBE	100.00%	68.41%	1.46	Overutilization	
2015	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	0.00%	3.30%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	0.00%	25.34%	0	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	0.00%	31.59%	0	Underutilization	p<.05
	Non-MWBE	100.00%	68.41%	1.46	Overutilization	
2016	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	0.00%	3.30%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	0.00%	25.34%	0	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	0.00%	31.59%	0	Underutilization	p<.05
	Non-MWBE	100.00%	68.41%	1.46	Overutilization	
2017	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	0.00%	3.30%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	0.00%	25.34%	0	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	0.00%	31.59%	0	Underutilization	p<.05
	Non-MWBE	100.00%	68.41%	1.46	Overutilization	
2018	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	0.00%	3.30%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	0.00%	25.34%	0	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	0.00%	31.59%	0	Underutilization	p<.05
	Non-MWBE	100.00%	68.41%	1.46	Overutilization	
Study Period	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	0.00%	3.30%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	0.00%	25.34%	0	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	0.00%	31.59%	0	Underutilization	p<.05
	Non-MWBE	100.00%	68.41%	1.46	Overutilization	

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Table F-4  
*Disparity Indices - Other Services (Prime)*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
 City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.00%	15.58%	0	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.74%	0	Underutilization	p<.05
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	0.00%	22.72%	0	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	0.00%	29.14%	0	Underutilization	p<.05
	Non-MWBE	100.00%	70.86%	1.41	Overutilization	
2015	African American	0.00%	15.58%	0	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.74%	0	Underutilization	p<.05
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	0.00%	22.72%	0	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	0.00%	29.14%	0	Underutilization	p<.05
	Non-MWBE	100.00%	70.86%	1.41	Overutilization	
2016	African American	3.50%	15.58%	0.22	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.74%	0	Underutilization	p<.05
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	3.50%	22.72%	0.15	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	3.50%	29.14%	0.12	Underutilization	p<.05
	Non-MWBE	96.50%	70.86%	1.36	Overutilization	
2017	African American	0.00%	15.58%	0	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.74%	0	Underutilization	p<.05
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	0.00%	22.72%	0	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	0.00%	29.14%	0	Underutilization	p<.05
	Non-MWBE	100.00%	70.86%	1.41	Overutilization	
2018	African American	23.48%	15.58%	1.51	Overutilization	
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	15.66%	2.74%	5.72	Overutilization	
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	39.14%	22.72%	1.72	Overutilization	
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	39.14%	29.14%	1.34	Overutilization	
	Non-MWBE	60.86%	70.86%	0.86	Underutilization	p<.05
Study Period	African American	4.87%	15.58%	0.31	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	2.15%	2.74%	0.78	Underutilization	Small Number
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	7.01%	22.72%	0.31	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	7.01%	29.14%	0.24	Underutilization	p<.05
	Non-MWBE	92.99%	70.86%	1.31	Overutilization	

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Table F-5  
*Disparity Indices– Goods & Supplies (Prime)*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
 City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.00%	7.55%	0	Underutilization	p<.05
	Asian American	0.00%	1.29%	0	Underutilization	p<.05
	Hispanic American	0.00%	1.10%	0	Underutilization	p<.05
	Native American	0.00%	0.74%	0	Underutilization	p<.05
	Total MBE	0.00%	10.68%	0	Underutilization	p<.05
	Women	0.00%	4.33%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.92%	0	Underutilization	p<.05
	Total MWBE	0.00%	15.93%	0	Underutilization	p<.05
	Non-MWBE	100.00%	84.07%	1.19	Overutilization	
2015	African American	0.00%	7.55%	0	Underutilization	Small Number
	Asian American	0.00%	1.29%	0	Underutilization	Small Number
	Hispanic American	0.00%	1.10%	0	Underutilization	Small Number
	Native American	0.00%	0.74%	0	Underutilization	Small Number
	Total MBE	0.00%	10.68%	0	Underutilization	Small Number
	Women	0.00%	4.33%	0	Underutilization	Small Number
	Unidentified MWBE	0.00%	0.92%	0	Underutilization	Small Number
	Total MWBE	0.00%	15.93%	0	Underutilization	Small Number
	Non-MWBE	0.00%	84.07%	0	Underutilization	Small Number
2016	African American	0.00%	7.55%	0	Underutilization	Small Number
	Asian American	0.00%	1.29%	0	Underutilization	Small Number
	Hispanic American	0.00%	1.10%	0	Underutilization	Small Number
	Native American	0.00%	0.74%	0	Underutilization	Small Number
	Total MBE	0.00%	10.68%	0	Underutilization	Small Number
	Women	0.00%	4.33%	0	Underutilization	Small Number
	Unidentified MWBE	0.00%	0.92%	0	Underutilization	Small Number
	Total MWBE	0.00%	15.93%	0	Underutilization	Small Number
	Non-MWBE	0.00%	84.07%	0	Underutilization	Small Number
2017	African American	0.00%	7.55%	0	Underutilization	Small Number
	Asian American	0.00%	1.29%	0	Underutilization	Small Number
	Hispanic American	0.00%	1.10%	0	Underutilization	Small Number
	Native American	0.00%	0.74%	0	Underutilization	Small Number
	Total MBE	0.00%	10.68%	0	Underutilization	Small Number
	Women	0.00%	4.33%	0	Underutilization	Small Number
	Unidentified MWBE	0.00%	0.92%	0	Underutilization	Small Number
	Total MWBE	0.00%	15.93%	0	Underutilization	Small Number
	Non-MWBE	0.00%	84.07%	0	Underutilization	Small Number
2018	African American	0.00%	7.55%	0	Underutilization	p<.05
	Asian American	0.00%	1.29%	0	Underutilization	p<.05
	Hispanic American	0.00%	1.10%	0	Underutilization	p<.05
	Native American	0.00%	0.74%	0	Underutilization	p<.05
	Total MBE	0.00%	10.68%	0	Underutilization	p<.05
	Women	0.00%	4.33%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.92%	0	Underutilization	p<.05
	Total MWBE	0.00%	15.93%	0	Underutilization	p<.05
	Non-MWBE	100.00%	84.07%	1.19	Overutilization	
Study Period	African American	0.00%	7.55%	0	Underutilization	p<.05
	Asian American	0.00%	1.29%	0	Underutilization	p<.05
	Hispanic American	0.00%	1.10%	0	Underutilization	p<.05
	Native American	0.00%	0.74%	0	Underutilization	p<.05
	Total MBE	0.00%	10.68%	0	Underutilization	p<.05
	Women	0.00%	4.33%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.92%	0	Underutilization	p<.05
	Total MWBE	0.00%	15.93%	0	Underutilization	p<.05
	Non-MWBE	100.00%	84.07%	1.19	Overutilization	

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## 2. Total Utilization (Prime Plus Subcontractor) Disparity Indices

Table F-6  
*Disparity Indices – Construction (Prime and Subcontractor)*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
 City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.84%	20.00%	0.04	Underutilization	p<.05
	Asian American	1.32%	3.49%	0.38	Underutilization	p<.05
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	2.16%	33.56%	0.06	Underutilization	p<.05
	Women	1.13%	7.52%	0.15	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	3.30%	41.48%	0.08	Underutilization	p<.05
	Non-MWBE	96.70%	58.52%	1.65	Overutilization	
2015	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	0.00%	3.49%	0	Underutilization	p<.05
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	0.00%	33.56%	0	Underutilization	p<.05
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	0.00%	41.48%	0	Underutilization	p<.05
	Non-MWBE	100.00%	58.52%	1.71	Overutilization	
2016	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	71.42%	3.49%	20.47	Overutilization	
	Hispanic American	0.18%	8.59%	0.02	Underutilization	p<.05
	Native American	0.67%	1.48%	0.46	Underutilization	p<.05
	Total MBE	72.27%	33.56%	2.15	Overutilization	
	Women	1.28%	7.52%	0.17	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	73.55%	41.48%	1.77	Overutilization	
	Non-MWBE	26.45%	58.52%	0.45	Underutilization	p<.05
2017	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	0.00%	3.49%	0	Underutilization	p<.05
	Hispanic American	4.05%	8.59%	0.47	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	4.05%	33.56%	0.12	Underutilization	p<.05
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	4.05%	41.48%	0.1	Underutilization	p<.05
	Non-MWBE	95.95%	58.52%	1.64	Overutilization	
2018	African American	0.00%	20.00%	0	Underutilization	p<.05
	Asian American	0.00%	3.49%	0	Underutilization	p<.05
	Hispanic American	0.00%	8.59%	0	Underutilization	p<.05
	Native American	0.00%	1.48%	0	Underutilization	p<.05
	Total MBE	0.00%	33.56%	0	Underutilization	p<.05
	Women	0.00%	7.52%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	0.00%	41.48%	0	Underutilization	p<.05
	Non-MWBE	100.00%	58.52%	1.71	Overutilization	
Study Period	African American	0.43%	20.00%	0.02	Underutilization	p<.05
	Asian American	28.72%	3.49%	8.23	Overutilization	
	Hispanic American	0.11%	8.59%	0.01	Underutilization	p<.05
	Native American	0.26%	1.48%	0.18	Underutilization	p<.05
	Total MBE	29.52%	33.56%	0.88	Underutilization	p<.05
	Women	1.09%	7.52%	0.14	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.40%	0	Underutilization	p<.05
	Total MWBE	30.61%	41.48%	0.74	Underutilization	p<.05
	Non-MWBE	69.39%	58.52%	1.19	Overutilization	

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Table F-7  
*Disparity Indices – Architecture & Engineering (Prime and Subcontractor)*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
 City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.00%	14.00%	0	Underutilization	Small Number
	Asian American	0.00%	12.00%	0	Underutilization	Small Number
	Hispanic American	0.00%	3.43%	0	Underutilization	Small Number
	Native American	0.00%	1.14%	0	Underutilization	Small Number
	Total MBE	0.00%	30.57%	0	Underutilization	Small Number
	Women	0.00%	8.86%	0	Underutilization	Small Number
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	Small Number
	Total MWBE	0.00%	40.00%	0	Underutilization	Small Number
	Non-MWBE	0.00%	60.00%	0	Underutilization	Small Number
2015	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	9.54%	12.00%	0.79	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	9.54%	30.57%	0.31	Underutilization	p<.05
	Women	25.93%	8.86%	2.93	Overutilization	
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	35.47%	40.00%	0.89	Underutilization	p<.05
	Non-MWBE	64.53%	60.00%	1.08	Overutilization	
2016	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	0.00%	12.00%	0	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	0.00%	30.57%	0	Underutilization	p<.05
	Women	0.00%	8.86%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	0.00%	40.00%	0	Underutilization	p<.05
	Non-MWBE	100.00%	60.00%	1.67	Overutilization	
2017	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	3.14%	12.00%	0.26	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	3.14%	30.57%	0.1	Underutilization	p<.05
	Women	34.17%	8.86%	3.86	Overutilization	
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	37.30%	40.00%	0.93	Underutilization	p<.05
	Non-MWBE	62.70%	60.00%	1.04	Overutilization	
2018	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	0.00%	12.00%	0	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	0.00%	30.57%	0	Underutilization	p<.05
	Women	0.00%	8.86%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	0.00%	40.00%	0	Underutilization	p<.05
	Non-MWBE	100.00%	60.00%	1.67	Overutilization	
Study Period	African American	0.00%	14.00%	0	Underutilization	p<.05
	Asian American	5.86%	12.00%	0.49	Underutilization	p<.05
	Hispanic American	0.00%	3.43%	0	Underutilization	p<.05
	Native American	0.00%	1.14%	0	Underutilization	p<.05
	Total MBE	5.86%	30.57%	0.19	Underutilization	p<.05
	Women	21.94%	8.86%	2.48	Overutilization	
	Unidentified MWBE	0.00%	0.57%	0	Underutilization	p<.05
	Total MWBE	27.80%	40.00%	0.7	Underutilization	p<.05
	Non-MWBE	72.20%	60.00%	1.2	Overutilization	

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Table F-8  
*Disparity Indices - Professional Services (Prime and Subcontractor)*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
 City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	0.00%	3.30%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	0.00%	25.34%	0	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	0.00%	31.59%	0	Underutilization	p<.05
	Non-MWBE	100.00%	68.41%	1.46	Overutilization	
2015	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	1.20%	3.30%	0.36	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	1.20%	25.34%	0.05	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	1.20%	31.59%	0.04	Underutilization	p<.05
	Non-MWBE	98.80%	68.41%	1.44	Overutilization	
2016	African American	0.84%	18.88%	0.04	Underutilization	p<.05
	Asian American	14.92%	3.30%	4.52	Overutilization	
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	15.76%	25.34%	0.62	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	15.76%	31.59%	0.5	Underutilization	p<.05
	Non-MWBE	84.24%	68.41%	1.23	Overutilization	
2017	African American	0.38%	18.88%	0.02	Underutilization	p<.05
	Asian American	2.26%	3.30%	0.69	Underutilization	p<.05
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	2.64%	25.34%	0.1	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	2.64%	31.59%	0.08	Underutilization	p<.05
	Non-MWBE	97.36%	68.41%	1.42	Overutilization	
2018	African American	0.00%	18.88%	0	Underutilization	p<.05
	Asian American	12.89%	3.30%	3.9	Overutilization	
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	12.89%	25.34%	0.51	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	12.89%	31.59%	0.41	Underutilization	p<.05
	Non-MWBE	87.11%	68.41%	1.27	Overutilization	
Study Period	African American	0.22%	18.88%	0.01	Underutilization	p<.05
	Asian American	2.77%	3.30%	0.84	Underutilization	
	Hispanic American	0.00%	2.23%	0	Underutilization	p<.05
	Native American	0.00%	0.93%	0	Underutilization	p<.05
	Total MBE	2.99%	25.34%	0.12	Underutilization	p<.05
	Women	0.00%	5.38%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.86%	0	Underutilization	p<.05
	Total MWBE	2.99%	31.59%	0.09	Underutilization	p<.05
	Non-MWBE	97.01%	68.41%	1.42	Overutilization	

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Table F-9  
*Disparity Indices - Other Services (Prime and Subcontractor)*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VA-WV-PA CSA  
 City of Frederick Disparity Study

Year	Race/Ethnicity	Percent of Total Dollars	Percent of Available Firms	Disparity Index	Disparate Impact of Utilization	Statistical Significance
2014	African American	0.00%	15.58%	0	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.74%	0	Underutilization	p<.05
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	0.00%	22.72%	0	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	0.00%	29.14%	0	Underutilization	p<.05
	Non-MWBE	100.00%	70.86%	1.41	Overutilization	
2015	African American	0.00%	15.58%	0	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.74%	0	Underutilization	p<.05
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	0.00%	22.72%	0	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	0.00%	29.14%	0	Underutilization	p<.05
	Non-MWBE	100.00%	70.86%	1.41	Overutilization	
2016	African American	3.50%	15.58%	0.22	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.74%	0	Underutilization	p<.05
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	3.50%	22.72%	0.15	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	3.50%	29.14%	0.12	Underutilization	p<.05
	Non-MWBE	96.50%	70.86%	1.36	Overutilization	
2017	African American	0.00%	15.58%	0	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	0.00%	2.74%	0	Underutilization	p<.05
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	0.00%	22.72%	0	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	0.00%	29.14%	0	Underutilization	p<.05
	Non-MWBE	100.00%	70.86%	1.41	Overutilization	
2018	African American	23.48%	15.58%	1.51	Overutilization	
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	15.66%	2.74%	5.72	Overutilization	
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	39.14%	22.72%	1.72	Overutilization	
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	39.14%	29.14%	1.34	Overutilization	
	Non-MWBE	60.86%	70.86%	0.86	Underutilization	p<.05
Study Period	African American	4.87%	15.58%	0.31	Underutilization	p<.05
	Asian American	0.00%	3.08%	0	Underutilization	p<.05
	Hispanic American	2.15%	2.74%	0.78	Underutilization	Small Number
	Native American	0.00%	1.33%	0	Underutilization	p<.05
	Total MBE	7.01%	22.72%	0.31	Underutilization	p<.05
	Women	0.00%	5.73%	0	Underutilization	p<.05
	Unidentified MWBE	0.00%	0.68%	0	Underutilization	p<.05
	Total MWBE	7.01%	29.14%	0.24	Underutilization	p<.05
	Non-MWBE	92.99%	70.86%	1.31	Overutilization	

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# APPENDIX G

## City of Frederick Disparity Study Expanded Regression Analysis



## APPENDIX G: Expanded Regression Analysis

The tables in this Appendix G (Tables 1 through 17) presents regression results on disparities controlling for a variety of race neutral factors in the City of Frederick Market area.

The results of the GSPC disparity analysis provide a framework to rationalize observed disparities in public contracting outcomes/success with the City of Frederick between SMWBEs and non-SMWBEs in the City of Frederick Market Area. Our regression analysis suggests that any observed disparities in public contracting outcomes between SMWBEs and non-SMWBEs are not explained by differential capacities for public contracting success with the City of Frederick. Our regression specifications control for firm public contracting capacity by including measures such as the education level of the firm owner, the age and market tenure of the firm, the size of the firm with respect to the number of employees and revenues, firm bonding capacity, willingness and ability to do business with the City of Frederick, registration status, and firm financial standing. This inclusion of these control covariates in our regression specifications permit an assessment of public contracting success/failure conditional on SMWBE and non-SMWBE public contracting capacity. The existence of public contracting success disparities between SMWBEs and non-SMWBEs— particularly when disaggregating by the racial/ethnic/gender status of owners— even after controlling for capacity suggests that relative to non-SMWBEs, SMWBEs face barriers independent of their capacity—or their ability—in securing public contracts and subcontracts with the City of Frederick.

Perhaps most indicative of racial/ethnic disparities in public contracting outcomes in the City of Frederick Market Area, our results reveal that the likelihood of SMWBEs that are owned by Black American and Women are more likely to have “never” been a prime contractor or subcontractor relative to non-SMWBEs over the time period under consideration in our analysis. This suggests that firms owned by Black American and Women face barriers in securing prime contracts and subcontracts from the City of Frederick. Coupled with our findings of perceived private sector discrimination and informal contracting network exclusion being higher for some SMWBEs, our results are also consistent with any observed disparities in securing prime contracts and subcontracts with the City of Frederick being driven, at least in part, by discrimination and public contracting network exclusion against SMWBEs that undermines their ability to secure prime contracts and subcontracts with the City of Frederick.

### A. Statistical and Econometric Framework

Methodologically, the GSPC statistical and econometric analysis of possible SMWBE public contracting disparities with the City of Frederick utilizes a Categorical Regression Model (CRM) framework.<sup>1</sup> As the covariates measuring public contracting activity/outcomes and other respondent characteristics in Table 1 are categorical responses to questionnaire items (e.g. public contracting bid ranges, yes, no), a CRM views the categories as latent variables with likelihood thresholds that are conditioned on other covariates. In the case where there are more than two categories and the succession of categories have a natural ranking, a CRM permits a determination as to how particular covariates condition the likelihood/probability of being in the highest valued category relative to the lower-valued categories. In the case of just two categorical but not naturally ordered categories, the CRM reduces to a Binary Regression

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<sup>1</sup> See: Richard D. McKelvey and William Zavoina. 1975. “A Statistical Model for the Analysis of Ordinal Level Dependent Variables,” *Journal of Mathematical Sociology*, 4: pp. 103 - 120.

Model (BRM).<sup>2</sup>

For all the CRM/BRM parameter estimates below, we report them as “odds ratios”, which measure the ratio of the probability of success and the probability of failure relative to the omitted group in all our specifications—nonminority owned firms.<sup>3</sup> When the odds ratio is greater (less) than unity for a parameter, the measured characteristic of interest to the outcome of interest has the effect of increasing (decreasing) the likelihood of the outcome under consideration relative to nonminority owned firms. We determine statistical significance on the basis of the estimated coefficient’s probability value—or P-value. The P-value is the probability of obtaining an estimate of the coefficient by chance alone, assuming that the null hypothesis of the variable having a zero effect is true. As a convention, GSPC rejects the null hypothesis of no effect, and concludes the estimated coefficient is statistically significant as long as P-value  $\leq .05$ , which we highlight in bold for all parameter estimates.

We report/discuss in all instances, the effects of the firm minority status indicators on the outcome of interest. The other regressors, while included in the parameter estimates, are not discussed. Their inclusion in the specification are simply to control for unobserved variables that may determine a firm’s capacity, that if omitted, would cause bias in the estimates of the effect of a firm’s minority status. The analytical exposition of the results also focuses on the instances in which the parameter estimates suggest that Small, Minority, and Women owned firms (SMWBEs) fare worse relative to non-SMWBEs for the outcomes under consideration.

Our regression strategy also reports on two different specifications of the outcome of interest. The first one includes a broad classification of non-white firms as measured by whether or not they are certified and/or deemed as SMWBEs. Each category in this regression approach will have overlap of firms owned by particular racial/ethnic groups and Women. As this overlap might mask differences in outcomes for particular non-white minorities and Women, the second specification disaggregates the broad categories by consideration categorization by specific racial/ethnic group and gender (e.g. Asian Americans, Black Americans, Hispanic Americans, Women). The exposition and discussion of the results are, in general, couched in terms of whether the outcome of interest suggests that broad SMWBE and race/ethnicity/gender characteristics of a firm is a possible driver or not of public contracting and other

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<sup>2</sup> More formally, if the latent realization of an outcome is  $Y_i^*$ , ranging from  $-\infty$  to  $\infty$ , a structural and conditional specification for  $Y_i^*$  is  $Y_i^* = \mathbf{X}_i \beta + \varepsilon_i$ , where  $\mathbf{X}$  is a vector of exogenous covariates,  $\beta$  is a vector of coefficients measuring the effects of particular covariates on the realization of  $Y_i^*$ , and  $\varepsilon_i$  is a random error. For categorical and ordinal outcomes  $m = 1 \dots J$ ,  $Y_i = m$  if  $\tau_{m-1} \leq Y_i^* < \tau_m$ , where the  $\tau_i$  are thresholds for the particular realizations of  $Y_i^* = m$ . Conditional on  $\mathbf{X}$  the likelihood/probability that  $Y_i$  takes on a particular realization is  $Pr(Y_i = m | \mathbf{X}) = \Phi(\tau_m - \mathbf{X}\beta) - \Phi(\tau_{m-1} - \mathbf{X}\beta)$ , where  $\Phi$  is the cumulative density function of  $\varepsilon$ . The GSPC methodology utilizes covariates that control and/or proxy for the education level of the firm owner, the age of the firm, the size of the firm with respect to the number of employees and revenues, firm bonding capacity, and firm financial standing.

<sup>3</sup> An “odds-ratio” is also a measure of “effect size” in that in addition to the statistical significance of a parameter, the “odds-ratio” provides a measure of a parameter estimate’s “practical magnitude.” For an “odds-ratio” the practical magnitude is the absolute value of 1 minus the “odds-ratio”, measuring the percentage change in the likelihood of observing the dependent outcome.

relevant disparities in the City of Frederick Market Area. In particular, we do not necessarily exposit upon the statistical insignificance of SMWBE status in a regression if it is not uniform across all the various categories, as the absence of such a uniformity suggests that for particular SMWBEs, or on average, the outcome of interest is a driver of public contracting disparities in the City of Frederick market area, and can be at least partially explained by SMWBE status.

As nonresponse probabilities in the GSPC survey are unknown, we estimate all parameters from our CRM/BRM specifications with bootstrapped standard errors to minimize/eliminate the bias that can result from the sample being unrepresentative of the population of interest due to nonresponse.<sup>4</sup> To the extent that bootstrapped standard errors enable consistent estimation of parameters given misspecification that could result from the omission of sampling and nonresponse weights, CRM/BRM parameter estimates with bootstrapped standard errors effects can mitigate/eliminate the bias caused by a sample that may not be fully representative of the population of interest.<sup>5</sup>

## **B. GSPC Survey of Business Owners Data**

Our City of Frederick disparity analysis is based on survey data compiled by GSPC, and constitutes a sample of firms from the bidder and vendor lists provided by the City of Frederick. The GSPC survey was a questionnaire that captured data on firm and individual owner characteristics in the City of Frederick market area. The questionnaire was sent to certified firms, prequalified firms, awardees, and subcontractors. Table 1 reports, for the 255 survey responses available, a summary description, and the mean and standard deviation of the covariates from the GSPC survey that are relevant to the analysis.

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<sup>4</sup> See: Bradley Efron and Robert J. Tibshirani. 1993. *An Introduction to the Bootstrap*, Chapman and Hall, NY.

<sup>5</sup> See: Silvia Goncalves and Halbert White. 2005. "Bootstrap Standard Error Estimates For Linear Regression," *Journal of the American Statistical Association*, 100: pp. 970 -979., and Stanislav Kolenikov. 2010. "Resampling Variance Estimation for Complex Survey Data," *Stata Journal*, 10: pp. 165 – 199.

**Table 1**  
**Covariate Summary**

<b>Covariate</b>	<b>Description</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Number of Observations</b>
Firm entered market within past five years	<i>Binary Variable:</i> 1 = yes	.219	.415	255
Number of times denied a commercial bank loan	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	.933	.686	255
Number of prime bids submitted on the City of Frederick projects	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.25	.763	255
Number of City of Frederick contracts awarded between 1/1/15 - 12/31/19	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.08	.621	255
Number of City of Frederick subcontracts awarded between 1/1/15 - 12/31/19	<i>Ordinal Variable:</i> 1 = 0 2 = 1 – 10 3 = 11 – 25 4 = 26 – 50 5 = 51 – 100 6 = Over 100	1.47	1.41	255
Did not serve as a contractor or subcontractor on the City of Frederick projects between 1/1/15 – 12/31/19	<i>Binary Variable:</i> 1 = Yes	.772	.420	255
Firm has experienced private sector discrimination	<i>Binary Variable</i> 1 = Yes	.239	.427	255
Firm has experienced discrimination at the City of Frederick	<i>Binary Variable</i> 1 = Yes	.102	.303	255
Firm owner believes informal networks enables business with the City of Frederick	<i>Binary Variable</i> 1 = Yes	.176	.382	255
Owner has more than 20 years of experience	<i>Binary Variable</i> 1 = Yes	.686	.465	255
Firm has more than 10 employees	<i>Binary Variable</i> 1 = Yes	.329	.471	255
Firm owner has a baccalaureate/post-graduate degree	<i>Binary Variable:</i> 1 = Yes	.749	.434	255
Firm gross revenue greater than \$1,500,000	<i>Binary Variable:</i> 1 = Yes	.204	.404	255
Firm bonding limit greater than \$1,500,000	<i>Binary Variable:</i> 1 = Yes	.075	.263	255

Financing is a	Binary Variable:	.059	.236	255
Barrier to Submitting	1 = Yes			
Bids and Securing				
Contracts From				
City of Frederick				
Firm is in the construction sector	Binary Variable: 1 = Yes	.247	.432	255
Firm is registered to do business with the City of Frederick	Binary Variable: 1 = Yes	.561	.497	255
Firm is willing and able to do business with the City of Frederick as a prime contractor	Binary Variable: 1 = Yes	.871	.336	255
Firm is willing and able to do business with the City of Frederick as a subcontractor	Binary Variable: 1 = Yes	.945	.228	255
Firm is a certified Minority Business Enterprise	Binary Variable: 1 = Yes	.584	.494	255
Firm is a certified Woman business enterprise	Binary Variable: 1 = Yes	.309	.463	255
Firm is a certified Small Business Enterprise	Binary Variable: 1 = Yes	.651	.478	255
Firm is a certified Disadvantaged Business Enterprise	Binary Variable: 1 = Yes	.572	.496	255
Firm is a LGBTQ Business Enterprise	Binary Variable: 1 = Yes	.012	.108	255
Majority Firm Owner	Binary Variable:	.416	.494	255
is Black American	1 = Yes			
Majority Firm Owner	Binary Variable:	.055	.228	255
is Hispanic American	1 = Yes			
Majority Firm Owner	Binary Variable:	.051	.220	255
is Asian American	1 = Yes			
Majority Firm Owner	Binary Variable:	.008	.088	255
is Native American	1 = Yes			
Majority Firm Owner is Biracial/multiracial	Binary Variable: 1 = Yes	.019	.139	255
Majority Firm Owner is a Woman	Binary Variable: 1 = Yes	.509	.501	255

Source: Griffin & Strong, P.C. 2021

### C. SMWBE Status and Firm Entry in the City of Frederick Market Area

To determine if SMWBE status is a barrier to the formation of new businesses in the City of Frederick Market Area, Tables 2 - 3 report, for each of the distinct SMWBEs and owner self-reported race/ethnicity in the GSPC sample, the estimated parameters of a Logit BRM with a binary variable for a firm establishing itself between the years 2014 – 2019 as the dependent variable. As standard control covariates we include measures of, or proxies for, the firm's owner's experience, the size of the firm having, firm gross revenue, firm bonding status, firm financial standing, whether or not the firm is in the construction/construction

services sector, and the education of the firm owner. As a goodness-of-fit measure, Pseudo- $R^2$  is reported.<sup>6</sup> The parameter estimates in Tables 2 – 3 suggest that firms owned by Black Americans, and Asian Americans, are more likely to be new firms, as the estimated odds ratio is greater than unity and statistically significant in those instances. As the excluded group is non-SMWBEs, to the extent that market experience is an important determinant of and correlated with success in bidding and securing public contracts, this suggests that for these SMWBEs, their relative inexperience in the market may partially explain disparities in public contracting between SMWBEs and non-SMWBEs in the City of Frederick Market Area, as tenure in the market also implies similar knowledge/experience about bidding and securing public contracts.

Table 2  
Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Firm Entry in the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Firm entered market within past 5 years: (Binary)		
Firm owner has more than 20 years' experience	0.2304	<b>0.0000</b>
Firm has more than 10 employees:	0.1319	0.6547
Firm owner has a baccalaureate/post-graduate degree	1.33	0.6153
Firm gross revenue greater than 1.5 million	0.7126	0.6972
Firm bonding limit greater than 1.5 million:	1.22	0.9493
Financing is a barrier for securing City of Frederick projects	2.66	<b>0.0273</b>
Firm is in the construction sector	0.5771	0.3814
Firm is registered to do business with the City of Frederick	0.5175	<b>0.0102</b>
Firm is a certified Minority Business Enterprise	1.13	0.8637
Firm is a certified Woman Enterprise	0.3276	0.0672
Firm is a certified Disadvantaged Business Enterprise	0.6981	0.6758
Firm is a certified Small Business Enterprise	2.77	0.1457
Firm is a LGBTQ Business Enterprise	8.15	0.8342
Observations	255	
Pseudo $R^2$	0.2345	

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<sup>6</sup> Pseudo- $R^2$  is not to be interpreted as the  $R^2$  in standard Ordinary Least Squares (OLS) estimation, as OLS proceeds by minimizing variance to get parameter estimates. Logit specifications are likelihood-based, and higher values of Pseudo- $R^2$  indicate that the specified model is an increasingly better alternative to a null model with only an intercept.

Table 3  
Logit Parameter Estimates (Odds Ratio):  
Owner Racial/Ethnic Status and Firm Entry in the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Firm entered market within past 5 years		
Firm owner has more than 20 years' experience	0.2189	<b>0.0000</b>
Firm has more than 10 employees:	0.1338	0.4642
Firm owner has a baccalaureate/post-graduate degree	0.9054	0.8627
Firm gross revenue greater than 1.5 million	0.8372	0.9468
Firm bonding limit greater than 1.5 million:	1.88	0.4374
Financing is a barrier for securing City of Frederick projects	1.99	<b>0.0374</b>
Firm is in the construction sector	0.5214	0.2186
Firm is registered to do business with the City of Frederick	0.5272	<b>0.0169</b>
Firm is Black American-owned	2.44	<b>0.0436</b>
Firm is Hispanic American-owned: Binary	4.97	0.4618
Firm is Asian American-owned	6.99	<b>0.0352</b>
Firm is Native American-owned	0.0012	0.1257
Firm is biracial/multiracial-owned	1.237	0.9818
Firm is Woman-owned	0.8521	0.6984
Observations	255	
Pseudo R <sup>2</sup>	0.2334	

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#### **D. Owner Racial/Ethnic Status and Commercial Bank Loan Denials In the City of Frederick Market Area**

To determine if SMWBEs face barriers in the private credit market, Tables 4 - 5 report, for each of the distinct SMWBEs and owner self-reported race/ethnicity/gender ownership characteristics in the GSPC sample, the estimated parameters of an Ordinal Logit BRM with the dependent variable being a categorical variable for the number of times the firm was denied a private commercial bank loan firm between the years 2014 – 2019. Relative to the regressions reported in Tables 2 – 3, we add additional binary controls to account for differences across firms in their willingness/ability to do business with the City of Frederick as a prime contractor and subcontractor.

The estimated odds ratios in Table 4 reveal that for the six distinct broadly classified SMWBEs in the GSPC sample, relative to non-SMWBEs—the excluded group in the CRM specification—disadvantaged firms have more bank loan denials, as the estimated odds ratio is greater than unity and statistically significant in this instance. When disaggregated by the race/ethnicity/gender of owners, the results in Table 5 suggest that firms owned Women have more commercial bank loan denials relative to non-SMWBEs. This suggests that

among SMWBEs in the City of Frederick Market Area, firms classified as disadvantaged, and owned by Women are relatively more likely to have their capacity to compete in the market for public procurement constrained as a result of private sector credit market discrimination.

Table 4  
Ordinal Logit Parameter Estimates (Odds Ratio):  
Owner Racial/Ethnic Status and Commercial Bank Loan Denials  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Number of times denied commercial bank loan (Ordinal)		
Firm owner has more than 20 years' experience	0.8938	0.7138
Firm has more than 10 employees	1.25	0.6583
Firm owner has a baccalaureate/post-graduate degree	0.4874	<b>0.0183</b>
Firm gross revenue greater than 1.5 million	2.52	<b>0.0063</b>
Firm bonding limit greater than 1.5 million	0.7784	0.5982
Financing is a barrier for securing City of Frederick projects	4.59	0.0847
Firm is in the construction sector	0.6613	0.2141
Firm is registered to do business with the City of Frederick	1.14	0.8734
Firm is willing/able prime contractor for the City of Frederick	2.56	<b>0.0317</b>
Firm is willing/able subcontractor for the City of Frederick	1.01	0.9863
Firm is a certified Minority Business Enterprise	1.35	0.4715
Firm is a certified Woman Enterprise	0.7036	0.2418
Firm is a certified Disadvantaged Business Enterprise	2.21	<b>0.0463</b>
Firm is a certified Small Business Enterprise	0.8417	0.6134
Firm is a LGBTQ Business Enterprise	0.9569	0.9871
Observations	255	
Pseudo $R^2$	0.0708	

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Table 5  
Ordinal Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Commercial Bank Loan Denials  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Number of times denied commercial bank loan (Ordinal)		
Firm owner has more than 20 years' experience	0.8539	0.6232
Firm has more than 10 employees	1.23	0.5218
Firm owner has a baccalaureate/post-graduate degree	0.6115	<b>0.0216</b>
Firm gross revenue greater than 1.5 million	2.28	0.0762
Firm bonding limit greater than 1.5 million	0.6825	0.5714
Financing is a barrier for securing City of Frederick projects	5.61	0.0687
Firm is in the construction sector	0.6927	0.2183
Firm is registered to do business with the City of Frederick	0.8624	0.5816
Firm is willing/able prime contractor for the City of Frederick	2.78	<b>0.0038</b>
Firm is willing/able subcontractor for the City of Frederick	1.14	0.7931
Firm is Black American-owned	1.26	0.5284
Firm is Hispanic American-owned	1.26	0.7421
Firm is Asian American-owned	1.58	.4837
Firm is Native American-owned	7.22	0.2786
Firm is biracial/multiracial-owned	0.4217	0.4138
Firm is Woman-owned	0.6457	<b>0.0115</b>
Observations	255	
Pseudo R <sup>2</sup>	0.0652	

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#### E. SMWBE Status and Number of Prime Bid Submissions In the City of Frederick Market Area

One reason disparities in public contracting outcomes between SMWBEs and non-SMWBEs could exist is that relative to non-SMWBEs, SMWBEs may be less interested in, and/or less likely to submit bids for public contracts. To determine if this is the case in the City of Frederick Market Area, Tables 6 - 7 report Ordinal Logit parameter estimates of a CRM with the number of prime contracting bids submitted by a firm to the City of Frederick between 2013 - 2018 as the dependent variable, for each of the distinct SMWBEs in the GSPC sample.

The results in Table 6 reveal that there are no differences in bid submissions between broadly classified

SMWBEs and non-SMWBEs. This suggests that for these type of SMWBEs, relative to non-SMWBEs any differential success in public contracting outcomes in the City of Frederick market area can't be explained by lower bid submissions. When disaggregating by race/ethnicity/gender, the results in Table 7 reveal that firms owned by Black Americans and Asian American are relatively less likely to submit prime bids. This suggests that any disparities in public outcomes between firms non-SMWBEs and firms owned by Black Americans and Asian Americans in the City of Frederick market area can possibly be explained by lower bid submissions with respect to these type of SMWBEs.

Table 6  
Ordinal Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Number of Prime Bid Submissions  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Number of prime bids on City of Frederick projects since 1/1/15 (Ordinal)		
Firm owner has more than 20 years' experience	2.01	<b>0.0083</b>
Firm has more than 10 employees	0.4124	0.0718
Firm owner has a baccalaureate/post-graduate degree	0.4846	0.1271
Firm gross revenue greater than 1.5 million	1.61	0.3672
Firm bonding limit greater than 1.5 million	2.79	<b>0.0076</b>
Financing is a barrier for securing City of Frederick projects	0.9876	0.9873
Firm is in the construction sector	0.9567	0.8547
Firm is registered to do business with the City of Frederick	2.59	<b>0.0038</b>
Firm is willing/able prime contractor for the City of Frederick	4.17	<b>0.0031</b>
Firm is willing/able subcontractor for the City of Frederick	0.7917	0.7263
Firm is a certified Minority Business Enterprise	0.5883	0.2571
Firm is a certified Woman Enterprise	0.8036	0.2974
Firm is a certified Disadvantaged Business Enterprise	1.06	0.8762
Firm is a certified Small Business Enterprise	1.04	0.9418
Firm is a LGBTQ Business Enterprise	1.36	0.7645
Observations	255	
Pseudo $R^2$	0.0983	

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Table 7  
Ordinal Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Number of Prime Bid Submissions  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Number of prime bids on City of Frederick projects since 1/1/15 (Ordinal)		
Firm owner has more than 20 years' experience	1.85	<b>0.0736</b>
Firm has more than 10 employees	0.4831	0.1915
Firm owner has a baccalaureate/post-graduate degree	0.6334	0.2348
Firm gross revenue greater than 1.5 million	1.21	0.7152
Firm bonding limit greater than 1.5 million	2.55	<b>0.0071</b>
Financing is a barrier for securing City of Frederick projects	0.8694	0.8673
Firm is in the construction sector	1.08	0.8147
Firm is registered to do business with the City of Frederick	2.81	<b>0.0000</b>
Firm is willing/able prime contractor for the City of Frederick	4.19	<b>0.0000</b>
Firm is willing/able subcontractor for the City of Frederick	0.8983	0.8315
Firm is Black-owned	0.5579	<b>0.0215</b>
Firm is Hispanic-owned	0.5873	0.2687
Firm is Asian-owned	0.1349	<b>0.0158</b>
Firm is Native American-owned	1.92	0.3631
Firm is biracial/multiracial-owned	.3783	0.4613
Firm is Woman-owned	0.7383	0.2874
Observations	255	
Pseudo $R^2$	0.1135	

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#### F. SMWBE Status and Number of Prime Contracts Awarded In the City of Frederick Market Area

To the extent that frequency of public contract bids reflects past experience as a prime contractor, SMWBEs can potentially become frequent prime contract bidders by actually gaining experience as successful prime contractors. As such, the frequency of prime bids by SMWBEs firms need not be a concern if they are actually gaining valuable experience as prime contractors that will translate into frequent contract bids and success later. To explore if this is the case in the City of Frederick Market Area, Tables 8 - 9 report Ordinal Logit BRM parameter estimates where the dependent variable is the number of City of Frederick prime contracts awarded to the firm between 2015 – 2019.

The results in Table 8 suggest that relative to non-SMWBEs certified minority-owned enterprise received fewer City of Frederick prime contracts awarded between 2015 – 2019, as the estimated odds ratio is less than unity, and statistically significant in these instances. When disaggregating by the race/ethnicity/gender of firm owners in Table 9, relative to non-SMWBEs, firms owned by Black Americans, Hispanic Americans, Asian Americans, and Biracials/Multiracials received less prime contracts relative to non-SMWBEs, as the estimated odds ratio is less than unity and statistically significant in these instances. In the case of firms owned by Native Americans, they were relatively more likely to received prime contracts. To the extent that success in public contracting is proportional to having prior prime awards, the parameter estimates in Tables 8 – 9 suggest that any contracting disparities between SMWBEs and non-SMWBEs can possibly be explained by past, and possibly discriminatory constraints, on SMWBE successfully winning prior prime contracts from the City of Frederick, which could translate into future capacity to secure prime contracts.

Table 8  
Ordinal Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Number of Prime Contracts Awarded  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand: # of City of Frederick prime contracts awarded 1/1/15 - 12/31/19 (Ordinal)</i>		
Firm owner has more than 20 years' experience	1.58	0.0936
Firm has more than 10 employees	0.5336	0.2374
Firm owner has a baccalaureate/post-graduate degree	0.6798	0.4381
Firm gross revenue greater than 1.5 million	1.18	0.6979
Firm bonding limit greater than 1.5 million	2.47	<b>0.0453</b>
Financing is a barrier for securing City of Frederick projects	0.6549	0.3271
Firm is in the construction sector	1.22	0.5816
Firm is registered to do business with the City of Frederick	1.76	<b>0.0513</b>
Firm is willing/able prime contractor for the City of Frederick	4.32	<b>0.0041</b>
Firm is a certified Minority Business Enterprise	0.3743	<b>0.0125</b>
Firm is a certified Woman Enterprise	0.9743	0.9263
Firm is a certified Disadvantaged Business Enterprise	0.9626	0.1472
Firm is a certified Small Business Enterprise	0.6812	0.3837
Firm is a LGBTQ Business Enterprise	4.15	0.2175
Observations	255	
Pseudo $R^2$	0.1048	

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Table 9  
Ordinal Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Number of Prime Contracts Awarded  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand: # of City of Frederick prime contracts awarded 1/1/15 - 12/31/19 (Ordinal)</i>		
Firm owner has more than 20 years' experience	1.34	0.3482
Firm has more than 10 employees	0.6874	0.5613
Firm owner has a baccalaureate/post-graduate degree	0.9449	0.8946
Firm gross revenue greater than 1.5 million	0.7759	0.6238
Firm bonding limit greater than 1.5 million	2.34	0.1371
Financing is a barrier for securing City of Frederick projects	0.5136	0.2187
Firm is in the construction sector	1.33	0.4143
Firm is registered to do business with the City of Frederick	2.06	<b>0.0161</b>
Firm is willing/able prime contractor for the City of Frederick	4.74	<b>0.0032</b>
Firm is Black American-owned	0.2506	<b>0.000</b>
Firm is Hispanic American-owned	0.3218	<b>0.0461</b>
Firm is Asian American-owned	0.0823	<b>0.0036</b>
Firm is Native American-owned	3.81	<b>0.0137</b>
Firm is biracial/multiracial-owned	0.1254	<b>0.0431</b>
Firm is Woman-owned	0.8743	0.7218
Observations	255	
Pseudo R <sup>2</sup>	0.1229	

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#### **G. SMWBE Status and Number of Subcontracts Awarded In the City of Fredrick Market Area**

To the extent that submitting and winning public contract bids requires experience, which can also be gained through subcontracting with lead prime firms with City of Frederick contracts, SMWBEs can potentially become more frequent and successful prime contract bidders by acquiring experience as subcontractors. As such, the low-frequency of prime bid submission and lower likelihood of being a prime contractor by SMWBEs need not be a concern if they are gaining valuable subcontracting experience that will translate into high frequency contract bids and success later. To explore if this is the case in the City of Frederick Market Area, Tables 10 - 11 report Ordinal Logit BRM parameter estimates where the dependent variable is the number of City of Frederick subcontracts awarded to the firm between 2015 – 2019.

The results in Table 10 suggest that relative to non-SMWBEs, SMWBEs are no different with respect to receiving subcontracts from the City of Frederick, as the estimated odds ratio is nevert statistically

significant in these instances. When disaggregating by the race/ethnicity/gender of firm owners in Table 11, relative to non-SMWBEs, firms owned by Blacks received fewer subcontracts, as the estimated odds ratio is less than unity and statistically significant in that instance. To the extent that success in public contracting is proportional to having prior City of Frederick subcontracts, the parameter estimates in Tables 10 – 11 suggest that any contracting disparities between SMWBEs owned by Black Americans and non-SMWBEs can possibly be explained by differences in having secured prior subcontracts from the City of Frederick, which could constrain success in winning prime bids, as subcontracting experience could translate into prime bid success.

Table 10  
Ordinal Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Number of Subcontracts Awarded  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> # of City of Frederick subcontracts awarded 1/1/15 - 12/31/19 (Ordinal)		
Firm owner has more than 20 years' experience	0.8238	0.6164
Firm has more than 10 employees	2.85	<b>0.0176</b>
Firm owner has a baccalaureate/post-graduate degree	0.7018	0.5437
Firm gross revenue greater than 1.5 million	0.7759	0.7318
Firm bonding limit greater than 1.5 million	0.3376	0.1314
Financing is a barrier for securing City of Frederick projects	0.4823	0.9213
Firm is in the construction sector	3.01	<b>0.0312</b>
Firm is registered to do business with the City of Frederick	4.94	<b>0.0000</b>
Firm is willing/able prime contractor for the City of Frederick	0.6233	0.7032
Firm is a certified Minority Business Enterprise	.4867	0.2218
Firm is a certified Woman Enterprise	2.23	0.1981
Firm is a certified Disadvantaged Business Enterprise	0.7719	0.7385
Firm is a certified Small Business Enterprise	0.9928	0.9947
Firm is a LGBTQ Business Enterprise	1.79	0.9316
Observations	255	
Pseudo $R^2$	0.1420	

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Table 11  
Ordinal Logit Parameter Estimates (Odds Ratio):  
Owner Racial/Ethnic Status and Number of Subcontracts Awarded  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand: # of City of Frederick subcontracts 1/1/15 - 12/31/19 (Ordinal)</i>		
Firm owner has more than 20 years' experience	0.6956	0.3762
Firm has more than 10 employees	3.14	<b>0.0015</b>
Firm owner has a baccalaureate/post-graduate degree	0.7326	0.4071
Firm gross revenue greater than 1.5 million	0.6074	0.3647
Firm bonding limit greater than 1.5 million	0.4138	0.8863
Financing is a barrier for securing City of Frederick projects	0.6515	0.9584
Firm is in the construction sector	3.18	<b>0.0000</b>
Firm is registered to do business with the City of Frederick	4.76	<b>0.0013</b>
Firm is willing/able prime contractor for the City of Frederick	0.6837	0.6108
Firm is Black American-owned	0.2098	<b>0.0136</b>
Firm is Hispanic American-owned	0.1420	0.7985
Firm is Asian American-owned	0.6727	0.9263
Firm is Native American-owned	1.91	0.8941
Firm is biracial/multiracial-owned	0.7491	0.9715
Firm is Woman-owned	2.36	0.0657
Observations	255	
Pseudo R <sup>2</sup>	0.1713	

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#### H. SMWBE Status and Never Serving as Contractor/Subcontractor In the City of Frederick Market Area

As the results in Tables 10 - 11 reflect only the effect of SMWBE status on the number of City of Frederick contracts and subcontracts, it may obscure the effects of, and the distribution of, zero outcomes—never having secured a City of Frederick contract or subcontract. Tables 12 – 13 report Logit parameter estimates where the dependent variable is whether the firm “never” served since 1/1/14 as a prime contractor or subcontractor for the City of Frederick. The results in Table 12 suggest that relative to non-SMWBEs, certified Minority Business Enterprises, are more likely to have never received a City of Frederick prime contract or subcontract, as the estimated odds ratio is greater than unity, and statistically significant in this instance. Disaggregating by race/ethnicity/gender, the results in Table 13 suggest that firms owned by Black American are more likely to have “never” been a prime contractor or subcontractor, as the estimated odds ratio is greater than unity and statistically significant in this instance. To the extent that success in public contracting is proportional to having prior prime contracts or subcontracts, the parameter estimates in

Tables 12 – 13 suggest that for certified minority, and firms owned by Black Americans, any contracting disparities between SMWBEs and non-SMWBEs can possibly be explained by their relative disadvantage in having secured prior prime contracts or subcontracts from the City of Frederick.

Table 12  
Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Never Serving as Contractor/Subcontractor  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Served as neither contractor/subcontractor on City of Frederick contract since 1/1/15 (Binary)		
Firm owner has more than 20 years' experience	0.6487	0.4518
Firm has more than 10 employees	0.6974	0.5326
Firm owner has a baccalaureate/post-graduate degree	1.72	0.2942
Firm gross revenue greater than 1.5 million	1.52	0.5483
Firm bonding limit greater than 1.5 million	1.29	0.7828
Financing is a barrier for securing City of Frederick projects	1.87	<b>0.0000</b>
Firm is in the construction sector	0.3873	0.1387
Firm is registered to do business with the City of Frederick	0.3065	<b>0.0385</b>
Firm is willing/able prime contractor for the City of Frederick	1.61	0.7286
Firm is a certified Minority Business Enterprise	3.58	<b>0.0463</b>
Firm is a certified Woman Enterprise	0.4557	0.2124
Firm is a certified Disadvantaged Business Enterprise	1.16	0.8487
Firm is a certified Small Business Enterprise	2.57	0.2714
Firm is a LGBTQ Business Enterprise	0.3827	0.9138
Observations	255	
Pseudo $R^2$	0.3004	

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Table 13  
Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Never Serving as Contractor/Subcontractor  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Served as neither contractor/subcontractor on City of Frederick contract since 1/1 /15 (Binary)		
Firm owner has more than 20 years' experience	0.7316	0.5165
Firm has more than 10 employees	0.6608	0.4972
Firm owner has a baccalaureate/post-graduate degree	1.49	0.3943
Firm gross revenue greater than 1.5 million	2.10	0.2627
Firm bonding limit greater than 1.5 million	1.26	0.7173
Financing is a barrier for securing City of Frederick projects	1.54	<b>0.0000</b>
Firm is in the construction sector	0.4353	0.1674
Firm is registered to do business with City of Frederick	0.2714	<b>0.0385</b>
Firm is willing/able prime contractor for City of Frederick	0.1893	0.7621
Firm is Black American-owned	8.78	<b>0.0000</b>
Firm is Hispanic American-owned	8.24	0.7813
Firm is Asian American-owned	6.51	0.7216
Firm is Native American-owned	0.4438	0.9485
Firm is biracial/multiracial-owned	2.67	0.9153
Firm is Woman-owned	0.7891	0.5837
Observations	255	
Pseudo R <sup>2</sup>	0.2953	

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## I. SMWBE Status and Perceived Discrimination at the City of Frederick

Disparate contracting and subcontracting outcomes between SMWBEs and non-SMWBEs could reflect, at least in part, the effects of discrimination against them by the City of Frederick, which conditions their entry into the market, and opportunities for success at the City of Frederick.<sup>7</sup> In Tables 14 – 15, we report Logit parameter estimates of the the effects of SMWBE status on having experienced discrimination—in particular the perception of having experienced discrimination at the City of Frederick.

<sup>7</sup> For the effects that discrimination can have upon the entry and performance of minority-owned firms. See: Borjas, George J., and Stephen G. Bronars. 1989. "Consumer Discrimination and Self-employment." *Journal of Political Economy*, 97: pp. 581-605.

To the extent that perceptions of discrimination correlate positively with actual discrimination at the City of Frederick, the Logit parameter estimates in Table 14 suggest that relative to non-SMWBEs, SMWBEs do not experience discrimination at the City of Frederick as the estimated odds ratio is never statistically significant in these instances. When disaggregated by the race/ethnicity of firm owners, the parameter estimates in Table 15 suggest that relative to non-SMWBEs, firms owned by Blacks Americans experience discrimination at the City of Frederick, as the estimated odds ratio is greater than unity and statistically significant in these instances. Relative to SMWBEs, firm owned by Asian Americans and Biracials/Multiracials experience less discrimination, at the estimated odds ratio is less than unity and statistically significant in these instances. In general, the parameter estimates suggests that, at least for SMWBEs owned by Black Americans, City of Frederick contracting disparities between them and non-SMWBEs can at least in part explained by discrimination at the City of Frederick that undermines their chances at successfully winning prime contracts at the City of Frederick.

Table 14  
Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Perceived Discrimination at the City of Frederick

	Coefficient	P-value
<i>Regressand:</i> Firm experienced discrimination at the City of Frederick (Binary)		
Firm owner has more than 20 years' experience	1.18	0.7193
Firm has more than 10 employees	0.9904	0.9915
Firm owner has a baccalaureate/post-graduate degree	0.6523	0.4871
Firm gross revenue greater than 1.5 million	0.1667	0.8284
Firm bonding limit greater than 1.5 million	0.6543	<b>0.0246</b>
Financing is a barrier for securing City of Frederick projects	1.82	0.8147
Firm is in the construction sector	2.06	<b>0.0325</b>
Firm is registered to do business with the City of Frederick	1.26	0.6538
Firm is willing/able prime contractor for the City of Frederick	2.38	0.8812
Firm is a certified Minority Business Enterprise	1.42	0.1342
Firm is a certified Woman Enterprise:	0.6258	0.9341
Firm is a certified Disadvantaged Business Enterprise	1.17	0.9643
Firm is a certified Small Business Enterprise	1.86	0.5127
Firm is a LGBTQ Business Enterprise:	9.6	0.8563
Observations	255	
Pseudo $R^2$	.1732	

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Table 15  
Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Perceived Discrimination at the City of Frederick

	<b>Coefficient</b>	<b>P-value</b>
<i>Regressand:</i> Firm experienced discrimination at the City of Frederick (Binary)		
Firm owner has more than 20 years' experience	1.19	0.7713
Firm has more than 10 employees	1.26	0.7621
Firm owner has a baccalaureate/post-graduate degree	0.7792	0.7318
Firm gross revenue greater than 1.5 million	0.1215	0.8546
Firm bonding limit greater than 1.5 million	0.4807	0.9263
Financing is a barrier for securing City of Frederick projects	1.16	0.9741
Firm is in the construction sector	2.31	0.3164
Firm is registered to do business with the City of Frederick	1.79	0.2916
Firm is willing/able prime contractor for the City of Frederick	2.72	0.9162
Firm is Black American-owned	4.91	<b>0.0168</b>
Firm is Hispanic American-owned	5.54	0.1714
Firm is Asian American-owned	0.0012	<b>0.0000</b>
Firm is Native American-owned	5.42	0.7365
Firm is biracial/multiracial-owned	0.0034	<b>0.0000</b>
Firm is Woman-owned	0.6373	0.4752
Observations	255	
Pseudo $R^2$	0.1807	

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## **J. SMWBE Status and Informal Contracting Networks In the City of Fredrick Market Area**

Similar to discrimination at the City of Frederick, the existence of informal public contracting networks that confer advantages to insiders in securing public contracts and subcontracts, and exclude SMWBEs, could possibly have an adverse effect on SMWBEs ability to secure public contracts and subcontracts with the City of Frederick.<sup>8</sup> To explore the role of such informal networks, Tables 16 - 17 report Logit parameter estimates where the dependent variable is if the firm owner agrees that informal networks enable success in public contracting with the City of Frederick.

<sup>8</sup> For evidence that access to informal networks can increase the likelihood of success in securing public contracting See: Sedita, Silvia Rita, and Roberta Apa. 2015. "The Impact of Inter-organizational Relationships on Contractors' Success in Winning Public Procurement Projects: The Case of the Construction Industry in the Veneto Region." *International Journal of Project Management*, 33: pp. 1548-1562.

The Logit parameter estimates in Table 16 suggest that relative to non-SMWBEs, Minority Business Enterprises perceive that informal networks enable contracting success with the City of Frederick as the estimated odds ratio is greater than unity and statistically significant in this instance. When disaggregated by the race/ethnicity/gender of firm owners, the parameter estimates in Table 17 suggest that relative to non-SMWBEs, firms owned by Black Americans perceive that informal networks enable contracting success with the City of Frederick as the estimated odds ratio is greater than unity and statistically significant in this instances. This suggests that, at least for SMWBEs owned by Black Americans, City of Frederick contracting disparities between them and non-SMWBEs are potentially explained by their exclusion from the City of Frederick public contracting networks that reduces their ability to secure prime contracts and subcontracts.

Table 16  
Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Informal Contracting Networks  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Yes, exclusion from informal networks prevent winning contracts with City of Frederick (Binary)		
Firm owner has more than 20 years' experience	1.19	<b>0.0431</b>
Firm has more than 10 employees	0.6157	0.4328
Firm owner has a baccalaureate/post-graduate degree	1.73	0.4657
Firm gross revenue greater than 1.5 million	0.4751	0.2174
Firm bonding limit greater than 1.5 million	1.36	0.9316
Financing is a barrier for securing City of Frederick projects	3.45	<b>0.0467</b>
Firm is in the construction sector	0.7801	0.6913
Firm is registered to do business with the City of Frederick	1.34	0.5961
Firm is willing/able prime contractor for the City of Frederick	9.69	0.8124
Firm is a certified Minority Business Enterprise	2.51	<b>0.0132</b>
Firm is a certified Woman Enterprise	0.9897	0.9756
Firm is a certified Disadvantaged Business Enterprise	0.5246	0.4213
Firm is a certified Small Business Enterprise	1.14	0.0841
Firm is a LGBTQ Business Enterprise	1.29	0.0948
Observations	255	
Pseudo $R^2$	0.2005	

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Table 17  
Logit Parameter Estimates (Odds Ratio):  
SMWBE Status and Informal Contracting Networks  
In the City of Frederick Market Area

	Coefficient	P-value
<i>Regressand:</i> Yes, exclusion from informal networks prevent winning contracts with City of Frederick (Binary)		
Firm owner has more than 20 years' experience	1.08	<b>0.0263</b>
Firm has more than 10 employees	0.7315	0.1728
Firm owner has a baccalaureate/post-graduate degree	1.81	0.2173
Firm gross revenue greater than 1.5 million	0.5417	0.1835
Firm bonding limit greater than 1.5 million	1.41	0.5712
Financing is a barrier for securing City of Frederick projects	3.54	<b>0.0281</b>
Firm is in the construction sector	0.8412	0.7316
Firm is registered to do business with the City of Frederick	1.38	0.3471
Firm is willing/able prime contractor for the City of Frederick	9.74	0.7613
Firm is Black American-owned	2.51	<b>0.0132</b>
Firm is Hispanic American-owned	10.97	0.8413
Firm is Asian American-owned	4.45	0.9147
Firm is Native American-owned	0.0023	0.1238
Firm is biracial/multiracial-owned	0.0016	0.0861
Firm is Woman-owned	1.31	0.5615
Observations	255	
Pseudo $R^2$	0.1797	

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# APPENDIX H

## City of Frederick Disparity Study Results from the Survey of Business Owners

# City of Frederick Disparity Study

## A brief note on how tables are calculated

Duplicate responses have been removed. Duplicate responses were removed based on businesses having either the same email address or same business name.

The total count of responses for each question includes only those participants who responded to that question. Participants who skipped or were not given a question are not included.

Table 1: Is your company a not for profit organization or a government entity?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>No</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 2: Is your firm ready, willing and able to do business as a prime contractor with The City of Frederick?

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	45 88.2 %	46 80.7 %	100 91.7 %	12 85.7 %	11 73.3 %	2 66.7 %	6 100 %	1 100 %	223 87.1 %
<b>No</b>	6 11.8 %	11 19.3 %	9 8.3 %	2 14.3 %	4 26.7 %	1 33.3 %	0 0 %	0 0 %	33 12.9 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 3: Is your firm ready, willing and able to do business as a subcontractor with The City of Frederick?

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	46 90.2 %	52 91.2 %	105 96.3 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	242 94.5 %
<b>No</b>	5 9.8 %	5 8.8 %	4 3.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	14 5.5 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %



Table 4: Which one of the following is your company's primary line of business?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Construction</b>	11 22 %	3 5.3 %	12 11.1 %	2 14.3 %	6 40 %	1 50 %	0 0 %	0 0 %	35 13.8 %
<b>Construction Related</b>	3 6 %	8 14 %	12 11.1 %	4 28.6 %	1 6.7 %	0 0 %	0 0 %	0 0 %	28 11.1 %
<b>Professional Services</b>	10 20 %	28 49.1 %	64 59.3 %	6 42.9 %	6 40 %	1 50 %	6 100 %	0 0 %	121 47.8 %
<b>Other Services</b>	10 20 %	9 15.8 %	16 14.8 %	2 14.3 %	2 13.3 %	0 0 %	0 0 %	0 0 %	39 15.4 %
<b>Goods</b>	16 32 %	9 15.8 %	4 3.7 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	30 11.9 %
<b>Total</b>	50 100 %	57 100 %	108 100 %	14 100 %	15 100 %	2 100 %	6 100 %	1 100 %	253 100 %

Table 5: How long has your company been in operation?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Under 1 year</b>	0 0 %	0 0 %	0 0 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>1-5 years</b>	4 7.8 %	8 14 %	33 30.3 %	4 28.6 %	7 46.7 %	0 0 %	1 16.7 %	0 0 %	57 22.3 %
<b>6-10 years</b>	2 3.9 %	7 12.3 %	25 22.9 %	5 35.7 %	4 26.7 %	0 0 %	2 33.3 %	0 0 %	45 17.6 %
<b>11-15 years</b>	5 9.8 %	10 17.5 %	18 16.5 %	2 14.3 %	2 13.3 %	0 0 %	0 0 %	0 0 %	37 14.5 %
<b>15-20 years</b>	5 9.8 %	8 14 %	11 10.1 %	1 7.1 %	0 0 %	2 66.7 %	0 0 %	0 0 %	27 10.5 %
<b>Over 20 years</b>	35 68.6 %	24 42.1 %	22 20.2 %	2 14.3 %	1 6.7 %	1 33.3 %	3 50 %	1 100 %	89 34.8 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 6: Is at least 51% percent of your company owned and controlled by a woman or women?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	0 0 %	57 100 %	58 53.2 %	4 28.6 %	6 40 %	1 33.3 %	5 83.3 %	0 0 %	131 51.2 %
<b>No</b>	51 100 %	0 0 %	51 46.8 %	10 71.4 %	9 60 %	2 66.7 %	1 16.7 %	1 100 %	125 48.8 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 7: Which of the following categories would you consider to be the race or ethnic origin that the person or persons that own at least 51% of the company identify as? Would you say:

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Caucasian</b>	49 96.1 %	53 93 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	102 39.8 %
<b>Black</b>	0 0 %	0 0 %	107 98.2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	107 41.8 %
<b>Asian</b>	0 0 %	0 0 %	0 0 %	13 92.9 %	0 0 %	0 0 %	0 0 %	0 0 %	13 5.1 %
<b>Hispanic</b>	0 0 %	0 0 %	0 0 %	0 0 %	14 93.3 %	0 0 %	0 0 %	0 0 %	14 5.5 %
<b>American Indian</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 66.7 %	0 0 %	0 0 %	2 0.8 %
<b>Bi-Racial or Multi-Racial</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	5 83.3 %	0 0 %	5 2 %
<b>Publicly Traded Company</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	1 0.4 %
<b>Other</b>	2 3.9 %	4 7 %	2 1.8 %	1 7.1 %	1 6.7 %	1 33.3 %	1 16.7 %	0 0 %	12 4.7 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 8: What is your current single project bonding limit?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>\$100,000 or less</b>	4 7.8 %	6 10.5 %	2 1.8 %	2 14.3 %	2 13.3 %	1 33.3 %	0 0 %	0 0 %	17 6.6 %
<b>\$100,001 - \$250,000</b>	0 0 %	1 1.8 %	10 9.2 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	12 4.7 %
<b>\$250,001 - \$500,000</b>	1 2 %	1 1.8 %	5 4.6 %	2 14.3 %	2 13.3 %	0 0 %	0 0 %	0 0 %	11 4.3 %
<b>\$500,001 - \$750,000</b>	0 0 %	0 0 %	2 1.8 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	3 1.2 %
<b>\$750,001 - \$1,000,000</b>	0 0 %	2 3.5 %	5 4.6 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	8 3.1 %
<b>\$1,000,001 - \$2,500,000</b>	6 11.8 %	2 3.5 %	8 7.3 %	1 7.1 %	0 0 %	0 0 %	2 33.3 %	0 0 %	19 7.4 %
<b>\$2,500,001 - \$5,000,000</b>	1 2 %	2 3.5 %	7 6.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	10 3.9 %
<b>\$5,000,001 - \$10,000,000</b>	4 7.8 %	1 1.8 %	1 0.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	6 2.3 %
<b>Over \$10 million</b>	3 5.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.2 %
<b>Don't Know</b>	12 23.5 %	12 21.1 %	13 11.9 %	2 14.3 %	3 20 %	1 33.3 %	0 0 %	1 100 %	44 17.2 %
<b>Not Applicable</b>	20 39.2 %	30 52.6 %	56 51.4 %	7 50 %	5 33.3 %	1 33.3 %	4 66.7 %	0 0 %	123 48 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 9: What is the largest single contract your firm has been awarded since July 1, 2013?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>\$100,000 or less</b>	13 25.5 %	22 38.6 %	28 25.7 %	1 7.1 %	3 20 %	1 33.3 %	3 50 %	0 0 %	71 27.7 %
<b>\$100,001 - \$250,000</b>	4 7.8 %	6 10.5 %	16 14.7 %	3 21.4 %	3 20 %	1 33.3 %	1 16.7 %	0 0 %	34 13.3 %
<b>\$250,001 - \$500,000</b>	5 9.8 %	6 10.5 %	13 11.9 %	4 28.6 %	2 13.3 %	0 0 %	0 0 %	0 0 %	30 11.7 %
<b>\$500,001 - \$750,000</b>	1 2 %	5 8.8 %	8 7.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	14 5.5 %
<b>\$750,001 - \$1,000,000</b>	2 3.9 %	3 5.3 %	6 5.5 %	1 7.1 %	4 26.7 %	0 0 %	0 0 %	0 0 %	16 6.2 %
<b>\$1,000,001 - \$2,500,000</b>	9 17.6 %	5 8.8 %	8 7.3 %	2 14.3 %	1 6.7 %	0 0 %	2 33.3 %	0 0 %	27 10.5 %
<b>\$2,500,001 - \$5,000,000</b>	1 2 %	2 3.5 %	6 5.5 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	10 3.9 %
<b>\$5,000,001 - \$10,000,000</b>	2 3.9 %	1 1.8 %	4 3.7 %	2 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	9 3.5 %
<b>Over \$10 million</b>	3 5.9 %	0 0 %	5 4.6 %	0 0 %	0 0 %	1 33.3 %	0 0 %	1 100 %	10 3.9 %
<b>Don't Know</b>	4 7.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 1.6 %
<b>Not applicable</b>	7 13.7 %	7 12.3 %	15 13.8 %	0 0 %	2 13.3 %	0 0 %	0 0 %	0 0 %	31 12.1 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 10: Indicate what you have performed as on any public or private contract since July 1, 2013.

	<i>Owners' Minority Status</i>								<i>Total</i>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Prime Contractor and Subcontractor</b>	20 39.2 %	25 43.9 %	56 51.4 %	7 50 %	8 53.3 %	1 33.3 %	4 66.7 %	1 100 %	122 47.7 %
<b>Prime Contractor only</b>	13 25.5 %	11 19.3 %	21 19.3 %	2 14.3 %	0 0 %	1 33.3 %	1 16.7 %	0 0 %	49 19.1 %
<b>Subcontractor only</b>	5 9.8 %	12 21.1 %	17 15.6 %	5 35.7 %	5 33.3 %	1 33.3 %	1 16.7 %	0 0 %	46 18 %
<b>Neither</b>	13 25.5 %	9 15.8 %	15 13.8 %	0 0 %	2 13.3 %	0 0 %	0 0 %	0 0 %	39 15.2 %
<i>Total</i>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 11: On average, how many employees and regular independent contractors does your company keep on the payroll, including full-time and part-time staff? (Number of Employees)

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	4 7.8 %	4 7 %	14 13.1 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	22 8.7 %
<b>1-10</b>	24 47.1 %	37 64.9 %	62 57.9 %	8 57.1 %	10 66.7 %	2 66.7 %	4 66.7 %	0 0 %	147 57.9 %
<b>11-30</b>	12 23.5 %	12 21.1 %	22 20.6 %	4 28.6 %	5 33.3 %	0 0 %	2 33.3 %	0 0 %	57 22.4 %
<b>31-50</b>	3 5.9 %	3 5.3 %	3 2.8 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	10 3.9 %
<b>51-75</b>	2 3.9 %	1 1.8 %	1 0.9 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	5 2 %
<b>76-100</b>	3 5.9 %	0 0 %	2 1.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	5 2 %
<b>101-300</b>	2 3.9 %	0 0 %	3 2.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	5 2 %
<b>Over 300</b>	1 2 %	0 0 %	0 0 %	1 7.1 %	0 0 %	0 0 %	0 0 %	1 100 %	3 1.2 %
<b>Total</b>	51 100 %	57 100 %	107 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	254 100 %

Table 12: What is the highest level of education completed by the owner of your company? Would you say:

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Some High School</b>	0 0 %	1 1.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>High School graduate</b>	7 14 %	10 17.5 %	2 1.8 %	0 0 %	2 13.3 %	1 33.3 %	1 16.7 %	0 0 %	23 9 %
<b>Some College</b>	8 16 %	4 7 %	13 11.9 %	0 0 %	1 6.7 %	2 66.7 %	0 0 %	0 0 %	28 11 %
<b>College Graduate</b>	18 36 %	26 45.6 %	36 33 %	2 14.3 %	6 40 %	0 0 %	1 16.7 %	0 0 %	89 34.9 %
<b>Post Graduate Degree</b>	14 28 %	15 26.3 %	55 50.5 %	11 78.6 %	4 26.7 %	0 0 %	4 66.7 %	0 0 %	103 40.4 %
<b>Trade or Technical Certificate</b>	2 4 %	1 1.8 %	3 2.8 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	7 2.7 %
<b>Don't Know</b>	1 2 %	0 0 %	0 0 %	1 7.1 %	1 6.7 %	0 0 %	0 0 %	1 100 %	4 1.6 %
<b>Total</b>	50 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	255 100 %



Table 13: How many years of experience in your company's line of business does the primary owner of your company have?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>1-5</b>	1 2 %	0 0 %	7 6.4 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	9 3.5 %
<b>6-10</b>	2 3.9 %	4 7 %	8 7.3 %	1 7.1 %	3 20 %	0 0 %	2 33.3 %	0 0 %	20 7.8 %
<b>11-15</b>	1 2 %	9 15.8 %	9 8.3 %	0 0 %	3 20 %	0 0 %	1 16.7 %	0 0 %	23 9 %
<b>16-20</b>	3 5.9 %	6 10.5 %	17 15.6 %	1 7.1 %	1 6.7 %	1 33.3 %	0 0 %	0 0 %	29 11.3 %
<b>More than 20</b>	44 86.3 %	38 66.7 %	68 62.4 %	11 78.6 %	8 53.3 %	2 66.7 %	3 50 %	1 100 %	175 68.4 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 14: Which of the following categories best approximates your company's gross revenues for calendar year 2018. Your best estimate will suffice.

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>\$100,000 or less</b>	3 6 %	14 24.6 %	37 33.9 %	2 14.3 %	6 40 %	1 33.3 %	0 0 %	0 0 %	63 24.8 %
<b>\$100,001 - \$250,000</b>	4 8 %	8 14 %	17 15.6 %	2 14.3 %	5 33.3 %	1 33.3 %	2 40 %	0 0 %	39 15.4 %
<b>\$250,001 - \$500,000</b>	6 12 %	9 15.8 %	19 17.4 %	3 21.4 %	0 0 %	0 0 %	0 0 %	0 0 %	37 14.6 %
<b>\$500,001 - \$750,000</b>	4 8 %	2 3.5 %	7 6.4 %	1 7.1 %	2 13.3 %	0 0 %	1 20 %	0 0 %	17 6.7 %
<b>\$750,001 - \$1,000,000</b>	4 8 %	6 10.5 %	5 4.6 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	16 6.3 %
<b>\$1,000,001 - \$1,320,000</b>	3 6 %	1 1.8 %	1 0.9 %	1 7.1 %	0 0 %	0 0 %	1 20 %	0 0 %	7 2.8 %
<b>\$1,320,001 - \$1,500,000</b>	2 4 %	0 0 %	2 1.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 1.6 %
<b>\$1,500,001 - \$5,000,000</b>	8 16 %	12 21.1 %	8 7.3 %	2 14.3 %	2 13.3 %	0 0 %	1 20 %	0 0 %	33 13 %
<b>\$5,000,001 - \$10,000,000</b>	4 8 %	4 7 %	6 5.5 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	15 5.9 %
<b>\$10,000,001 - \$15,000,000</b>	2 4 %	0 0 %	2 1.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 1.6 %
<b>\$15,000,001 - \$20,000,000</b>	1 2 %	0 0 %	1 0.9 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.2 %
<b>\$20,000,001 - \$39,500,000</b>	2 4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 0.8 %
<b>Over \$39,500,000</b>	3 6 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	4 1.6 %
<b>Don't Know</b>	4 8 %	1 1.8 %	4 3.7 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	10 3.9 %
<b>Total</b>	50 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	5 100 %	1 100 %	254 100 %

Table 15: Is your business qualified to do business with The City of Frederick?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	45 88.2 %	46 80.7 %	76 69.7 %	12 85.7 %	11 73.3 %	2 66.7 %	5 83.3 %	1 100 %	198 77.3 %
<b>No</b>	0 0 %	0 0 %	2 1.8 %	0 0 %	0 0 %	0 0 %	1 16.7 %	0 0 %	3 1.2 %
<b>Not sure</b>	6 11.8 %	11 19.3 %	31 28.4 %	2 14.3 %	4 26.7 %	1 33.3 %	0 0 %	0 0 %	55 21.5 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 16: Is your company registered to do business with The City of Frederick?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	43 84.3 %	32 56.1 %	44 40.4 %	11 78.6 %	7 46.7 %	2 66.7 %	4 66.7 %	1 100 %	144 56.2 %
<b>No</b>	8 15.7 %	25 43.9 %	65 59.6 %	3 21.4 %	8 53.3 %	1 33.3 %	2 33.3 %	0 0 %	112 43.8 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 17: Is your company registered to do business with any other government entity, including but not limited to: The County of Frederick, City of Baltimore, Washington, DC, State of Maryland, Maryland Department of Transportation?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	41 80.4 %	46 80.7 %	104 95.4 %	14 100 %	14 93.3 %	3 100 %	5 83.3 %	1 100 %	228 89.1 %
<b>No</b>	10 19.6 %	11 19.3 %	5 4.6 %	0 0 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	28 10.9 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 18: Why is your company not registered to do business with The City of Frederick? Indicate all that apply. [Do not know how to register?]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	7 87.5 %	22 88 %	50 78.1 %	0 0 %	6 75 %	1 100 %	1 50 %	0 0 %	87 78.4 %
<b>Selected</b>	1 12.5 %	3 12 %	14 21.9 %	3 100 %	2 25 %	0 0 %	1 50 %	0 0 %	24 21.6 %
<b>Total</b>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 100 %	111 100 %

Table 19: Did not know there was a registry?

	<i>Owners' Minority Status</i>								<i>Total</i>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	2 25 %	8 32 %	22 34.4 %	0 0 %	4 50 %	0 0 %	2 100 %	0 0 %	38 34.2 %
<b>Selected</b>	6 75 %	17 68 %	42 65.6 %	3 100 %	4 50 %	1 100 %	0 0 %	0 0 %	73 65.8 %
<i>Total</i>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 100 %	111 100 %

Table 20: Do not see any benefit in registering?

	<i>Owners' Minority Status</i>								<i>Total</i>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	7 87.5 %	25 100 %	58 90.6 %	2 66.7 %	7 87.5 %	1 100 %	2 100 %	0 0 %	102 91.9 %
<b>Selected</b>	1 12.5 %	0 0 %	6 9.4 %	1 33.3 %	1 12.5 %	0 0 %	0 0 %	0 0 %	9 8.1 %
<i>Total</i>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 100 %	111 100 %

Table 21: Do not want to do business with government?

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 0 %	111 100 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Total</b>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 100 %	111 100 %

Table 22: Do not want to do business with The City of Frederick?

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 0 %	111 100 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Total</b>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 100 %	111 100 %

Table 23: Do not see opportunities in my field of work?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	7 87.5 %	20 80 %	58 90.6 %	2 66.7 %	6 75 %	1 100 %	2 100 %	0 0 %	96 86.5 %
<b>Selected</b>	1 12.5 %	5 20 %	6 9.4 %	1 33.3 %	2 25 %	0 0 %	0 0 %	0 0 %	15 13.5 %
<b>Total</b>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 100 %	111 100 %

Table 24: Do not believe firm would be awarded contract?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	8 100 %	25 100 %	45 70.3 %	3 100 %	6 75 %	1 100 %	2 100 %	0 0 %	90 81.1 %
<b>Selected</b>	0 0 %	0 0 %	19 29.7 %	0 0 %	2 25 %	0 0 %	0 0 %	0 0 %	21 18.9 %
<b>Total</b>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 100 %	111 100 %

Table 25: Other, please specify

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	7 87.5 %	22 88 %	55 85.9 %	2 66.7 %	7 87.5 %	1 100 %	1 50 %	0 0 %	95 85.6 %
<b>Selected</b>	1 12.5 %	3 12 %	9 14.1 %	1 33.3 %	1 12.5 %	0 0 %	1 50 %	0 0 %	16 14.4 %
<b>Total</b>	8 100 %	25 100 %	64 100 %	3 100 %	8 100 %	1 100 %	2 100 %	0 100 %	111 100 %



Table 26: From July 1, 2013 through June 30, 2018, how many times has your company submitted bids or proposals for projects as prime contractor on: [City of Frederick Public Projects]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	18 35.3 %	32 56.1 %	82 75.2 %	10 71.4 %	12 80 %	1 33.3 %	3 50 %	0 0 %	158 61.7 %
<b>1-10</b>	19 37.3 %	20 35.1 %	20 18.3 %	1 7.1 %	2 13.3 %	2 66.7 %	2 33.3 %	0 0 %	66 25.8 %
<b>11-25</b>	3 5.9 %	0 0 %	1 0.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 1.6 %
<b>26-50</b>	2 3.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 0.8 %
<b>51-100</b>	1 2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>Over 100</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	1 0.4 %
<b>Don't Know/NA</b>	8 15.7 %	5 8.8 %	6 5.5 %	3 21.4 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	24 9.4 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 27: Private Sector Projects

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	20 39.2 %	20 35.1 %	44 40.4 %	6 42.9 %	6 40 %	1 33.3 %	2 33.3 %	0 0 %	99 38.7 %
<b>1-10</b>	4 7.8 %	10 17.5 %	40 36.7 %	6 42.9 %	5 33.3 %	2 66.7 %	1 16.7 %	0 0 %	68 26.6 %
<b>11-25</b>	2 3.9 %	4 7 %	9 8.3 %	0 0 %	3 20 %	0 0 %	1 16.7 %	0 0 %	19 7.4 %
<b>26-50</b>	1 2 %	2 3.5 %	5 4.6 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	8 3.1 %
<b>51-100</b>	2 3.9 %	5 8.8 %	4 3.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	11 4.3 %
<b>Over 100</b>	14 27.5 %	6 10.5 %	2 1.8 %	0 0 %	0 0 %	0 0 %	1 16.7 %	1 100 %	24 9.4 %
<b>Don't Know/NA</b>	8 15.7 %	10 17.5 %	5 4.6 %	2 14.3 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	27 10.5 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 28: Other Public Sector (non-The City of Frederick Projects)

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	17 33.3 %	20 35.1 %	46 42.2 %	4 28.6 %	6 40 %	1 33.3 %	1 16.7 %	0 0 %	95 37.1 %
<b>1-10</b>	8 15.7 %	17 29.8 %	34 31.2 %	6 42.9 %	5 33.3 %	2 66.7 %	3 50 %	0 0 %	75 29.3 %
<b>11-25</b>	5 9.8 %	2 3.5 %	10 9.2 %	1 7.1 %	1 6.7 %	0 0 %	0 0 %	0 0 %	19 7.4 %
<b>26-50</b>	2 3.9 %	1 1.8 %	7 6.4 %	1 7.1 %	1 6.7 %	0 0 %	0 0 %	0 0 %	12 4.7 %
<b>51-100</b>	0 0 %	3 5.3 %	3 2.8 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	7 2.7 %
<b>Over 100</b>	10 19.6 %	4 7 %	2 1.8 %	0 0 %	0 0 %	0 0 %	1 16.7 %	1 100 %	18 7 %
<b>Don't Know/NA</b>	9 17.6 %	10 17.5 %	7 6.4 %	2 14.3 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	30 11.7 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 29: From July 1, 2013 through June 30, 2018, how many times has your company been awarded contracts to perform as a prime contractor: [City of Frederick Public Projects]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	20 39.2 %	37 64.9 %	96 88.1 %	11 78.6 %	14 93.3 %	1 33.3 %	4 66.7 %	0 0 %	183 71.5 %
<b>1-10</b>	17 33.3 %	16 28.1 %	3 2.8 %	0 0 %	0 0 %	2 66.7 %	1 16.7 %	0 0 %	39 15.2 %
<b>11-25</b>	4 7.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 1.6 %
<b>26-50</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>51-100</b>	1 2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>Over 100</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Don't Know/NA</b>	9 17.6 %	4 7 %	10 9.2 %	3 21.4 %	1 6.7 %	0 0 %	1 16.7 %	1 100 %	29 11.3 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 30: Private Sector Projects

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	19 37.3 %	25 43.9 %	49 45 %	6 42.9 %	7 46.7 %	1 33.3 %	2 33.3 %	0 0 %	109 42.6 %
<b>1-10</b>	5 9.8 %	11 19.3 %	45 41.3 %	4 28.6 %	5 33.3 %	2 66.7 %	1 16.7 %	0 0 %	73 28.5 %
<b>11-25</b>	4 7.8 %	4 7 %	5 4.6 %	0 0 %	0 0 %	0 0 %	2 33.3 %	0 0 %	15 5.9 %
<b>26-50</b>	1 2 %	4 7 %	1 0.9 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	7 2.7 %
<b>51-100</b>	3 5.9 %	2 3.5 %	0 0 %	1 7.1 %	1 6.7 %	0 0 %	0 0 %	0 0 %	7 2.7 %
<b>Over 100</b>	11 21.6 %	5 8.8 %	2 1.8 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	19 7.4 %
<b>Don't Know/NA</b>	8 15.7 %	6 10.5 %	7 6.4 %	3 21.4 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	26 10.2 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 31: Other Public Sector (non-The City of Frederick Projects)

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	18 35.3 %	25 43.9 %	63 57.8 %	6 42.9 %	10 66.7 %	1 33.3 %	2 33.3 %	0 0 %	125 48.8 %
<b>1-10</b>	9 17.6 %	16 28.1 %	34 31.2 %	6 42.9 %	3 20 %	2 66.7 %	2 33.3 %	0 0 %	72 28.1 %
<b>11-25</b>	6 11.8 %	1 1.8 %	1 0.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	8 3.1 %
<b>26-50</b>	0 0 %	1 1.8 %	4 3.7 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	6 2.3 %
<b>51-100</b>	4 7.8 %	3 5.3 %	1 0.9 %	0 0 %	0 0 %	0 0 %	1 16.7 %	0 0 %	9 3.5 %
<b>Over 100</b>	5 9.8 %	3 5.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	9 3.5 %
<b>Don't Know/NA</b>	9 17.6 %	8 14 %	6 5.5 %	2 14.3 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	27 10.5 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 32: Approximately how many times did you serve as a subcontractor on a The City of Frederick project from July 1, 2013 through June 30, 2018?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	37 72.5 %	42 73.7 %	104 95.4 %	11 78.6 %	14 93.3 %	2 66.7 %	5 83.3 %	0 0 %	215 84 %
<b>1-10</b>	7 13.7 %	9 15.8 %	1 0.9 %	2 14.3 %	1 6.7 %	1 33.3 %	1 16.7 %	0 0 %	22 8.6 %
<b>11-25</b>	2 3.9 %	0 0 %	1 0.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.2 %
<b>26-50</b>	1 2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>51-100</b>	0 0 %	0 0 %	1 0.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>Over 100</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Don't Know</b>	4 7.8 %	6 10.5 %	2 1.8 %	1 7.1 %	0 0 %	0 0 %	0 0 %	1 100 %	14 5.5 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 33: The following is a list of things that may prevent companies from bidding or obtaining work on a project. In your experience, have any of the following been a barrier to your firm obtaining work on projects for The City of Frederick? (check all that apply)  
[Excessive experience requirements]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	51 100 %	50 87.7 %	86 78.9 %	13 92.9 %	11 73.3 %	3 100 %	5 83.3 %	1 100 %	220 85.9 %
<b>Selected</b>	0 0 %	7 12.3 %	23 21.1 %	1 7.1 %	4 26.7 %	0 0 %	1 16.7 %	0 0 %	36 14.1 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 34: Performance bond requirements

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	50 98 %	51 89.5 %	97 89 %	14 100 %	12 80 %	3 100 %	6 100 %	1 100 %	234 91.4 %
<b>Selected</b>	1 2 %	6 10.5 %	12 11 %	0 0 %	3 20 %	0 0 %	0 0 %	0 0 %	22 8.6 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %



Table 35: Excessive paperwork

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	46 90.2 %	50 87.7 %	98 89.9 %	13 92.9 %	9 60 %	3 100 %	5 83.3 %	1 100 %	225 87.9 %
<b>Selected</b>	5 9.8 %	7 12.3 %	11 10.1 %	1 7.1 %	6 40 %	0 0 %	1 16.7 %	0 0 %	31 12.1 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 36: Bid bond requirements

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	48 94.1 %	53 93 %	98 89.9 %	14 100 %	13 86.7 %	3 100 %	6 100 %	1 100 %	236 92.2 %
<b>Selected</b>	3 5.9 %	4 7 %	11 10.1 %	0 0 %	2 13.3 %	0 0 %	0 0 %	0 0 %	20 7.8 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 37: Financing

	Owners' Minority Status								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	50 98 %	55 96.5 %	99 90.8 %	14 100 %	13 86.7 %	3 100 %	6 100 %	1 100 %	241 94.1 %
<b>Selected</b>	1 2 %	2 3.5 %	10 9.2 %	0 0 %	2 13.3 %	0 0 %	0 0 %	0 0 %	15 5.9 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 38: Insurance requirements

	Owners' Minority Status								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	50 98 %	53 93 %	102 93.6 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	244 95.3 %
<b>Selected</b>	1 2 %	4 7 %	7 6.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	12 4.7 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 39: Bid specifications

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	49 96.1 %	53 93 %	99 90.8 %	13 92.9 %	14 93.3 %	3 100 %	6 100 %	1 100 %	238 93 %
<b>Selected</b>	2 3.9 %	4 7 %	10 9.2 %	1 7.1 %	1 6.7 %	0 0 %	0 0 %	0 0 %	18 7 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 40: Lack of access to competitive supplier pricing

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	51 100 %	55 96.5 %	96 88.1 %	13 92.9 %	14 93.3 %	3 100 %	5 83.3 %	1 100 %	238 93 %
<b>Selected</b>	0 0 %	2 3.5 %	13 11.9 %	1 7.1 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	18 7 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 41: Limited time given to prepare bid package or quote

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	48 94.1 %	51 89.5 %	90 82.6 %	13 92.9 %	11 73.3 %	3 100 %	6 100 %	1 100 %	223 87.1 %
<b>Selected</b>	3 5.9 %	6 10.5 %	19 17.4 %	1 7.1 %	4 26.7 %	0 0 %	0 0 %	0 0 %	33 12.9 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 42: Limited knowledge of purchasing /contracting policies and procedures

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	49 96.1 %	50 87.7 %	93 85.3 %	12 85.7 %	12 80 %	3 100 %	6 100 %	1 100 %	226 88.3 %
<b>Selected</b>	2 3.9 %	7 12.3 %	16 14.7 %	2 14.3 %	3 20 %	0 0 %	0 0 %	0 0 %	30 11.7 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 43: Language Barriers

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 44: Lack of experience

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	51 100 %	55 96.5 %	101 92.7 %	12 85.7 %	15 100 %	3 100 %	6 100 %	1 100 %	244 95.3 %
<b>Selected</b>	0 0 %	2 3.5 %	8 7.3 %	2 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	12 4.7 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 45: Lack of personnel

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	51 100 %	56 98.2 %	101 92.7 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	247 96.5 %
<b>Selected</b>	0 0 %	1 1.8 %	8 7.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	9 3.5 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 46: Contract too large

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	50 98 %	53 93 %	94 86.2 %	13 92.9 %	14 93.3 %	3 100 %	6 100 %	1 100 %	234 91.4 %
<b>Selected</b>	1 2 %	4 7 %	15 13.8 %	1 7.1 %	1 6.7 %	0 0 %	0 0 %	0 0 %	22 8.6 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 47: Contract too expensive to bid

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	49 96.1 %	55 96.5 %	99 90.8 %	12 85.7 %	15 100 %	3 100 %	6 100 %	1 100 %	240 93.8 %
<b>Selected</b>	2 3.9 %	2 3.5 %	10 9.2 %	2 14.3 %	0 0 %	0 0 %	0 0 %	0 0 %	16 6.2 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 48: Selection process

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	50 98 %	53 93 %	93 85.3 %	12 85.7 %	14 93.3 %	3 100 %	6 100 %	1 100 %	232 90.6 %
<b>Selected</b>	1 2 %	4 7 %	16 14.7 %	2 14.3 %	1 6.7 %	0 0 %	0 0 %	0 0 %	24 9.4 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 49: Not certified

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	50 98 %	54 94.7 %	100 91.7 %	13 92.9 %	15 100 %	3 100 %	6 100 %	1 100 %	242 94.5 %
<b>Selected</b>	1 2 %	3 5.3 %	9 8.3 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	14 5.5 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 50: Unfair competition with large firms

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	50 98 %	49 86 %	75 68.8 %	9 64.3 %	12 80 %	2 66.7 %	5 83.3 %	1 100 %	203 79.3 %
<b>Selected</b>	1 2 %	8 14 %	34 31.2 %	5 35.7 %	3 20 %	1 33.3 %	1 16.7 %	0 0 %	53 20.7 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %



Table 51: None of the above

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	9 17.6 %	25 43.9 %	64 58.7 %	9 64.3 %	9 60 %	1 33.3 %	1 16.7 %	0 0 %	118 46.1 %
<b>Selected</b>	42 82.4 %	32 56.1 %	45 41.3 %	5 35.7 %	6 40 %	2 66.7 %	5 83.3 %	1 100 %	138 53.9 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 52: What is the amount of time that it typically takes to receive payment, from the date you submit your invoice, from The City of Frederick for your services on The City of Frederick projects?

	<i>Owners' Minority Status</i>								<i>Total</i>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Less than 30 days</b>	17 33.3 %	12 21.1 %	4 3.7 %	1 7.1 %	0 0 %	2 66.7 %	0 0 %	0 0 %	36 14.1 %
<b>30-60 days</b>	19 37.3 %	7 12.3 %	5 4.6 %	3 21.4 %	1 6.7 %	1 33.3 %	1 16.7 %	0 0 %	37 14.5 %
<b>60-90 days</b>	4 7.8 %	0 0 %	1 0.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	5 2 %
<b>90-120 days</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Over 120 days</b>	0 0 %	1 1.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>Don't Know/NA</b>	11 21.6 %	37 64.9 %	99 90.8 %	10 71.4 %	14 93.3 %	0 0 %	5 83.3 %	1 100 %	177 69.1 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 53: Is your company a certified Minority, Woman, Disadvantaged, Small, or LGBTQ business?

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	5 9.8 %	40 70.2 %	104 95.4 %	14 100 %	15 100 %	2 66.7 %	6 100 %	0 0 %	186 72.7 %
<b>No</b>	46 90.2 %	17 29.8 %	5 4.6 %	0 0 %	0 0 %	1 33.3 %	0 0 %	1 100 %	70 27.3 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 54: What is your certification? (Indicate all that apply) [LGBTQE (Lesbian, Gay, Bi-Sexual, Transgender, Queer Enterprise)]

	<i>Owners' Minority Status</i>								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	0 0 %	1 2.5 %	2 1.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.6 %
<b>No</b>	3 60 %	33 82.5 %	65 62.5 %	10 71.4 %	11 73.3 %	0 0 %	6 100 %	0 0 %	128 68.8 %
<b>N/A</b>	2 40 %	6 15 %	37 35.6 %	4 28.6 %	4 26.7 %	2 100 %	0 0 %	0 0 %	55 29.6 %
<b>Total</b>	5 100 %	40 100 %	104 100 %	14 100 %	15 100 %	2 100 %	6 100 %	0 100 %	186 100 %

Table 55: MBE (Minority Business Enterprise)

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	0 0 %	21 52.5 %	95 91.3 %	13 92.9 %	14 93.3 %	2 100 %	5 83.3 %	0 0 %	150 80.6 %
<b>No</b>	3 60 %	16 40 %	7 6.7 %	0 0 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	28 15.1 %
<b>N/A</b>	2 40 %	3 7.5 %	2 1.9 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	8 4.3 %
<b>Total</b>	5 100 %	40 100 %	104 100 %	14 100 %	15 100 %	2 100 %	6 100 %	0 100 %	186 100 %

Table 56: WBE (Women Business Enterprise)

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	0 0 %	34 85 %	33 31.7 %	3 21.4 %	4 26.7 %	1 50 %	5 83.3 %	0 0 %	80 43 %
<b>No</b>	3 60 %	5 12.5 %	54 51.9 %	7 50 %	9 60 %	1 50 %	1 16.7 %	0 0 %	80 43 %
<b>N/A</b>	2 40 %	1 2.5 %	17 16.3 %	4 28.6 %	2 13.3 %	0 0 %	0 0 %	0 0 %	26 14 %
<b>Total</b>	5 100 %	40 100 %	104 100 %	14 100 %	15 100 %	2 100 %	6 100 %	0 100 %	186 100 %

Table 57: DBE (Disadvantaged Business Enterprise)

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	1 20 %	24 60 %	91 87.5 %	11 78.6 %	14 93.3 %	2 100 %	4 66.7 %	0 0 %	147 79 %
<b>No</b>	2 40 %	13 32.5 %	9 8.7 %	2 14.3 %	1 6.7 %	0 0 %	2 33.3 %	0 0 %	29 15.6 %
<b>N/A</b>	2 40 %	3 7.5 %	4 3.8 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	10 5.4 %
<b>Total</b>	5 100 %	40 100 %	104 100 %	14 100 %	15 100 %	2 100 %	6 100 %	0 100 %	186 100 %

Table 58: SBE (Small Business Enterprise)

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	5 100 %	32 80 %	98 94.2 %	12 85.7 %	14 93.3 %	1 50 %	5 83.3 %	0 0 %	167 89.8 %
<b>No</b>	0 0 %	5 12.5 %	4 3.8 %	1 7.1 %	1 6.7 %	1 50 %	1 16.7 %	0 0 %	13 7 %
<b>N/A</b>	0 0 %	3 7.5 %	2 1.9 %	1 7.1 %	0 0 %	0 0 %	0 0 %	0 0 %	6 3.2 %
<b>Total</b>	5 100 %	40 100 %	104 100 %	14 100 %	15 100 %	2 100 %	6 100 %	0 100 %	186 100 %

Table 59: Why is your company not certified as an Minority, Woman, Disadvantaged, Small, or LGBTQ business? (Indicate all that apply)  
[I do not understand the certification process]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	37 82.2 %	13 76.5 %	4 80 %	0 0 %	0 0 %	1 100 %	0 0 %	1 100 %	56 81.2 %
<b>Selected</b>	8 17.8 %	4 23.5 %	1 20 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	13 18.8 %
<b>Total</b>	45 100 %	17 100 %	5 100 %	0 100 %	0 100 %	1 100 %	0 100 %	1 100 %	69 100 %

Table 60: We do not meet one or more of the requirements for certification

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	19 42.2 %	13 76.5 %	5 100 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	38 55.1 %
<b>Selected</b>	26 57.8 %	4 23.5 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	31 44.9 %
<b>Total</b>	45 100 %	17 100 %	5 100 %	0 100 %	0 100 %	1 100 %	0 100 %	1 100 %	69 100 %

Table 61: Certification is too expensive

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	45 100 %	17 100 %	5 100 %	0 0 %	0 0 %	1 100 %	0 0 %	1 100 %	69 100 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Total</b>	45 100 %	17 100 %	5 100 %	0 100 %	0 100 %	1 100 %	0 100 %	1 100 %	69 100 %

Table 62: I do not want governmental agencies to have information about my company

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	45 100 %	16 94.1 %	5 100 %	0 0 %	0 0 %	1 100 %	0 0 %	1 100 %	68 98.6 %
<b>Selected</b>	0 0 %	1 5.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 1.4 %
<b>Total</b>	45 100 %	17 100 %	5 100 %	0 100 %	0 100 %	1 100 %	0 100 %	1 100 %	69 100 %

Table 63: I have not had time to get certified/the process is too time-consuming

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	43 95.6 %	10 58.8 %	3 60 %	0 0 %	0 0 %	1 100 %	0 0 %	1 100 %	58 84.1 %
<b>Selected</b>	2 4.4 %	7 41.2 %	2 40 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	11 15.9 %
<b>Total</b>	45 100 %	17 100 %	5 100 %	0 100 %	0 100 %	1 100 %	0 100 %	1 100 %	69 100 %

Table 64: Certification does not benefit and/or will negatively impact my company

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	44 97.8 %	16 94.1 %	5 100 %	0 0 %	0 0 %	1 100 %	0 0 %	1 100 %	67 97.1 %
<b>Selected</b>	1 2.2 %	1 5.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 2.9 %
<b>Total</b>	45 100 %	17 100 %	5 100 %	0 100 %	0 100 %	1 100 %	0 100 %	1 100 %	69 100 %



Table 65: Do not understand how certification can benefit my firm

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	30 66.7 %	12 70.6 %	2 40 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	45 65.2 %
<b>Selected</b>	15 33.3 %	5 29.4 %	3 60 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	24 34.8 %
<b>Total</b>	45 100 %	17 100 %	5 100 %	0 100 %	0 100 %	1 100 %	0 100 %	1 100 %	69 100 %

Table 66: Between July 1, 2013 through June 30, 2018, did your company apply and receive any of the following? [Business start-up loan?]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Never Applied</b>	50 98 %	55 96.5 %	100 91.7 %	13 92.9 %	14 93.3 %	2 66.7 %	6 100 %	1 100 %	241 94.1 %
<b>Applied, Never Approved</b>	0 0 %	0 0 %	7 6.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	7 2.7 %
<b>Applied, Some Approved</b>	0 0 %	1 1.8 %	2 1.8 %	1 7.1 %	0 0 %	1 33.3 %	0 0 %	0 0 %	5 2 %
<b>Applied, All Approved</b>	1 2 %	1 1.8 %	0 0 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	3 1.2 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 67: Operating capital loan?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Never Applied</b>	44	49	73	11	12	1	5	1	196
	86.3 %	86 %	67 %	78.6 %	80 %	33.3 %	83.3 %	100 %	76.6 %
<b>Applied, Never Approved</b>	1	0	10	1	1	0	1	0	14
	2 %	0 %	9.2 %	7.1 %	6.7 %	0 %	16.7 %	0 %	5.5 %
<b>Applied, Some Approved</b>	1	4	14	1	1	1	0	0	22
	2 %	7 %	12.8 %	7.1 %	6.7 %	33.3 %	0 %	0 %	8.6 %
<b>Applied, All Approved</b>	5	4	12	1	1	1	0	0	24
	9.8 %	7 %	11 %	7.1 %	6.7 %	33.3 %	0 %	0 %	9.4 %
<b>Total</b>	51	57	109	14	15	3	6	1	256
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

Table 68: Equipment loan?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Never Applied</b>	40	45	96	13	13	2	5	1	215
	78.4 %	78.9 %	88.1 %	92.9 %	86.7 %	66.7 %	83.3 %	100 %	84 %
<b>Applied, Never Approved</b>	0	0	3	0	0	0	1	0	4
	0 %	0 %	2.8 %	0 %	0 %	0 %	16.7 %	0 %	1.6 %
<b>Applied, Some Approved</b>	0	0	3	0	1	0	0	0	4
	0 %	0 %	2.8 %	0 %	6.7 %	0 %	0 %	0 %	1.6 %
<b>Applied, All Approved</b>	11	12	7	1	1	1	0	0	33
	21.6 %	21.1 %	6.4 %	7.1 %	6.7 %	33.3 %	0 %	0 %	12.9 %
<b>Total</b>	51	57	109	14	15	3	6	1	256
	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

Table 69: Commercial/Professional liability insurance?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Never Applied</b>	19 37.3 %	10 17.5 %	31 28.4 %	1 7.1 %	9 60 %	0 0 %	2 33.3 %	1 100 %	73 28.5 %
<b>Applied, Never Approved</b>	0 0 %	0 0 %	2 1.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 0.8 %
<b>Applied, Some Approved</b>	1 2 %	1 1.8 %	8 7.3 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	11 4.3 %
<b>Applied, All Approved</b>	31 60.8 %	46 80.7 %	68 62.4 %	13 92.9 %	6 40 %	2 66.7 %	4 66.7 %	0 0 %	170 66.4 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 70: What was the largest commercial loan you received from July 1, 2013 through June 30, 2018?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>\$50,000 or less</b>	5 9.8 %	15 26.3 %	16 14.7 %	2 14.3 %	2 13.3 %	2 66.7 %	1 16.7 %	0 0 %	43 16.8 %
<b>\$50,001 - \$100,000</b>	4 7.8 %	6 10.5 %	4 3.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	14 5.5 %
<b>\$100,001 - \$300,000</b>	5 9.8 %	6 10.5 %	11 10.1 %	2 14.3 %	1 6.7 %	0 0 %	0 0 %	0 0 %	25 9.8 %
<b>\$300,001 - \$500,000</b>	2 3.9 %	1 1.8 %	4 3.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	7 2.7 %
<b>\$500,001 - \$1,000,000</b>	2 3.9 %	0 0 %	2 1.8 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	5 2 %
<b>\$1,000,001 - \$3,000,000</b>	1 2 %	0 0 %	1 0.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 0.8 %
<b>\$3,000,001 - \$5,000,000</b>	1 2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>\$5,000,001 to \$10,000,000</b>	1 2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>Over \$10,000,000</b>	1 2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>Don't Know/NA</b>	29 56.9 %	29 50.9 %	71 65.1 %	10 71.4 %	11 73.3 %	1 33.3 %	5 83.3 %	1 100 %	157 61.3 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 71: How many times have you been denied a commercial (business) bank loan from July 1, 2013 through June 30, 2018?

	<i>Owners' Minority Status</i>								<i>Total</i>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>None</b>	40 78.4 %	44 77.2 %	54 49.5 %	10 71.4 %	6 40 %	1 33.3 %	4 66.7 %	0 0 %	159 62.1 %
<b>1-10</b>	1 2 %	4 7 %	24 22 %	2 14.3 %	4 26.7 %	2 66.7 %	0 0 %	0 0 %	37 14.5 %
<b>11-25</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>26-50</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>51-100</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Over 100</b>	0 0 %	0 0 %	1 0.9 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 0.4 %
<b>Don't Know/NA</b>	10 19.6 %	9 15.8 %	30 27.5 %	2 14.3 %	5 33.3 %	0 0 %	2 33.3 %	1 100 %	59 23 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 72: Of the items your company was denied, what was the denial reason? (Please check all that apply) [Business start-up loan?] [Insufficient Documentation]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	1 100 %	8 88.9 %	1 100 %	0 0 %	1 100 %	0 0 %	0 0 %	11 91.7 %
<b>Selected</b>	0 0 %	0 0 %	1 11.1 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 8.3 %
<b>Total</b>	0 100 %	1 100 %	9 100 %	1 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 73: Insufficient Business History

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	1 100 %	5 55.6 %	1 100 %	0 0 %	1 100 %	0 0 %	0 0 %	8 66.7 %
<b>Selected</b>	0 0 %	0 0 %	4 44.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 33.3 %
<b>Total</b>	0 100 %	1 100 %	9 100 %	1 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 74: Confusion about Process

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	1 100 %	9 100 %	1 100 %	0 0 %	0 0 %	0 0 %	0 0 %	11 91.7 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	1 8.3 %
<b>Total</b>	0 100 %	1 100 %	9 100 %	1 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 75: Credit History

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	0 0 %	4 44.4 %	1 100 %	0 0 %	1 100 %	0 0 %	0 0 %	6 50 %
<b>Selected</b>	0 0 %	1 100 %	5 55.6 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	6 50 %
<b>Total</b>	0 100 %	1 100 %	9 100 %	1 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 76: Don't Know

	Owners' Minority Status								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	1 100 %	8 88.9 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	10 83.3 %
<b>Selected</b>	0 0 %	0 0 %	1 11.1 %	1 100 %	0 0 %	0 0 %	0 0 %	0 0 %	2 16.7 %
<b>Total</b>	0 100 %	1 100 %	9 100 %	1 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 77: N/A

	Owners' Minority Status								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	1 100 %	8 88.9 %	1 100 %	0 0 %	1 100 %	0 0 %	0 0 %	11 91.7 %
<b>Selected</b>	0 0 %	0 0 %	1 11.1 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 8.3 %
<b>Total</b>	0 100 %	1 100 %	9 100 %	1 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %



Table 78: Of the items your company was denied, what was the denial reason? (Please check all that apply) [Operating capital loan?]  
[Insufficient Documentation]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	2 100 %	4 100 %	22 95.7 %	2 100 %	2 100 %	1 100 %	1 100 %	0 0 %	34 97.1 %
<b>Selected</b>	0 0 %	0 0 %	1 4.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 2.9 %
<b>Total</b>	2 100 %	4 100 %	23 100 %	2 100 %	2 100 %	1 100 %	1 100 %	0 100 %	35 100 %

Table 79: Insufficient Business History

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	2 100 %	4 100 %	18 78.3 %	1 50 %	2 100 %	1 100 %	1 100 %	0 0 %	29 82.9 %
<b>Selected</b>	0 0 %	0 0 %	5 21.7 %	1 50 %	0 0 %	0 0 %	0 0 %	0 0 %	6 17.1 %
<b>Total</b>	2 100 %	4 100 %	23 100 %	2 100 %	2 100 %	1 100 %	1 100 %	0 100 %	35 100 %

Table 80: Confusion about Process

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	2 100 %	4 100 %	21 91.3 %	2 100 %	1 50 %	1 100 %	1 100 %	0 0 %	32 91.4 %
<b>Selected</b>	0 0 %	0 0 %	2 8.7 %	0 0 %	1 50 %	0 0 %	0 0 %	0 0 %	3 8.6 %
<b>Total</b>	2 100 %	4 100 %	23 100 %	2 100 %	2 100 %	1 100 %	1 100 %	0 100 %	35 100 %

Table 81: Credit History

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	1 50 %	1 25 %	16 69.6 %	2 100 %	1 50 %	1 100 %	1 100 %	0 0 %	23 65.7 %
<b>Selected</b>	1 50 %	3 75 %	7 30.4 %	0 0 %	1 50 %	0 0 %	0 0 %	0 0 %	12 34.3 %
<b>Total</b>	2 100 %	4 100 %	23 100 %	2 100 %	2 100 %	1 100 %	1 100 %	0 100 %	35 100 %

Table 82: Don't Know

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	2 100 %	4 100 %	18 78.3 %	1 50 %	2 100 %	0 0 %	1 100 %	0 0 %	28 80 %
<b>Selected</b>	0 0 %	0 0 %	5 21.7 %	1 50 %	0 0 %	1 100 %	0 0 %	0 0 %	7 20 %
<b>Total</b>	2 100 %	4 100 %	23 100 %	2 100 %	2 100 %	1 100 %	1 100 %	0 100 %	35 100 %

Table 83: N/A

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	1 50 %	3 75 %	16 69.6 %	2 100 %	1 50 %	1 100 %	0 0 %	0 0 %	24 68.6 %
<b>Selected</b>	1 50 %	1 25 %	7 30.4 %	0 0 %	1 50 %	0 0 %	1 100 %	0 0 %	11 31.4 %
<b>Total</b>	2 100 %	4 100 %	23 100 %	2 100 %	2 100 %	1 100 %	1 100 %	0 100 %	35 100 %

Table 84: Of the items your company was denied, what was the denial reason? (Please check all that apply) [Equipment loan?]  
[Insufficient Documentation]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	0 0 %	6 100 %	0 0 %	1 100 %	0 0 %	1 100 %	0 0 %	8 100 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Total</b>	0 100 %	0 100 %	6 100 %	0 100 %	1 100 %	0 100 %	1 100 %	0 100 %	8 100 %

Table 85: Insufficient Business History

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	0 0 %	4 66.7 %	0 0 %	1 100 %	0 0 %	1 100 %	0 0 %	6 75 %
<b>Selected</b>	0 0 %	0 0 %	2 33.3 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 25 %
<b>Total</b>	0 100 %	0 100 %	6 100 %	0 100 %	1 100 %	0 100 %	1 100 %	0 100 %	8 100 %

Table 86: Confusion about Process

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	0 0 %	6 100 %	0 0 %	1 100 %	0 0 %	1 100 %	0 0 %	8 100 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Total</b>	0 100 %	0 100 %	6 100 %	0 100 %	1 100 %	0 100 %	1 100 %	0 100 %	8 100 %

Table 87: Credit History

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	0 0 %	5 83.3 %	0 0 %	1 100 %	0 0 %	1 100 %	0 0 %	7 87.5 %
<b>Selected</b>	0 0 %	0 0 %	1 16.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 12.5 %
<b>Total</b>	0 100 %	0 100 %	6 100 %	0 100 %	1 100 %	0 100 %	1 100 %	0 100 %	8 100 %

Table 88: Don't Know

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	0 0 %	5 83.3 %	0 0 %	0 0 %	0 0 %	1 100 %	0 0 %	6 75 %
<b>Selected</b>	0 0 %	0 0 %	1 16.7 %	0 0 %	1 100 %	0 0 %	0 0 %	0 0 %	2 25 %
<b>Total</b>	0 100 %	0 100 %	6 100 %	0 100 %	1 100 %	0 100 %	1 100 %	0 100 %	8 100 %

Table 89: N/A

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	0 0 %	3 50 %	0 0 %	1 100 %	0 0 %	0 0 %	0 0 %	4 50 %
<b>Selected</b>	0 0 %	0 0 %	3 50 %	0 0 %	0 0 %	0 0 %	1 100 %	0 0 %	4 50 %
<b>Total</b>	0 100 %	0 100 %	6 100 %	0 100 %	1 100 %	0 100 %	1 100 %	0 100 %	8 100 %

Table 90: Of the items your company was denied, what was the denial reason? (Please check all that apply) [Commercial/Professional liability insurance?] [Insufficient Documentation]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	1 100 %	1 100 %	9 100 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	12 100 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Total</b>	1 100 %	1 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 91: Insufficient Business History

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	1 100 %	1 100 %	7 77.8 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	10 83.3 %
<b>Selected</b>	0 0 %	0 0 %	2 22.2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 16.7 %
<b>Total</b>	1 100 %	1 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 92: Confusion about Process

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	1 100 %	1 100 %	9 100 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	12 100 %
<b>Selected</b>	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %
<b>Total</b>	1 100 %	1 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 93: Credit History

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	1 100 %	1 100 %	8 88.9 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	11 91.7 %
<b>Selected</b>	0 0 %	0 0 %	1 11.1 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	1 8.3 %
<b>Total</b>	1 100 %	1 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %



Table 94: Don't Know

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	1 100 %	1 100 %	7 77.8 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	9 75 %
<b>Selected</b>	0 0 %	0 0 %	2 22.2 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	3 25 %
<b>Total</b>	1 100 %	1 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 95: N/A

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Not Selected</b>	0 0 %	0 0 %	4 44.4 %	0 0 %	0 0 %	1 100 %	0 0 %	0 0 %	5 41.7 %
<b>Selected</b>	1 100 %	1 100 %	5 55.6 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	7 58.3 %
<b>Total</b>	1 100 %	1 100 %	9 100 %	0 100 %	0 100 %	1 100 %	0 100 %	0 100 %	12 100 %

Table 96: Do you feel as though you experienced discriminatory behavior from the private sector (i.e., non-governmental entities) from July 1, 2013 through June 30, 2018?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	1 2 %	7 12.3 %	44 40.4 %	4 28.6 %	5 33.3 %	1 33.3 %	0 0 %	0 0 %	62 24.2 %
<b>No</b>	47 92.2 %	43 75.4 %	28 25.7 %	5 35.7 %	5 33.3 %	2 66.7 %	3 50 %	1 100 %	134 52.3 %
<b>Don't Know</b>	3 5.9 %	7 12.3 %	37 33.9 %	5 35.7 %	5 33.3 %	0 0 %	3 50 %	0 0 %	60 23.4 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 97: From July 1, 2015 through June 30, 2019, how often has your company experienced any racial, gender, or ethnicity discriminatory behavior from The City of Frederick?

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Never</b>	47 92.2 %	44 77.2 %	60 55 %	9 64.3 %	4 26.7 %	2 66.7 %	4 66.7 %	1 100 %	171 66.8 %
<b>Seldom</b>	1 2 %	2 3.5 %	3 2.8 %	0 0 %	2 13.3 %	0 0 %	0 0 %	0 0 %	8 3.1 %
<b>Often</b>	1 2 %	0 0 %	5 4.6 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	6 2.3 %
<b>Very Often</b>	0 0 %	0 0 %	10 9.2 %	0 0 %	1 6.7 %	1 33.3 %	0 0 %	0 0 %	12 4.7 %
<b>Don't Know</b>	2 3.9 %	11 19.3 %	31 28.4 %	5 35.7 %	8 53.3 %	0 0 %	2 33.3 %	0 0 %	59 23 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 98: Do you believe there is an informal network of prime and subcontractors doing business with The City of Frederick that monopolize the public contracting process?

	Owners' Minority Status								<b>Total</b>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Yes</b>	4 7.8 %	23 40.4 %	64 58.7 %	5 35.7 %	9 60 %	0 0 %	4 66.7 %	0 0 %	109 42.6 %
<b>No</b>	47 92.2 %	34 59.6 %	45 41.3 %	9 64.3 %	6 40 %	3 100 %	2 33.3 %	1 100 %	147 57.4 %
<b>Total</b>	51 100 %	57 100 %	109 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	256 100 %

Table 99: Please tell us if you strongly agree, agree, neither agree nor disagree, disagree or strongly disagree with each of the following statements: [My company's exclusion from this informal network has prevented us from winning contracts with The City of Frederick.]

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Strongly agree</b>	0 0 %	1 4.3 %	22 37.3 %	3 60 %	3 33.3 %	0 0 %	0 0 %	0 0 %	29 27.9 %
<b>Agree</b>	1 25 %	6 26.1 %	6 10.2 %	1 20 %	3 33.3 %	0 0 %	0 0 %	0 0 %	17 16.3 %
<b>Neither agree nor disagree</b>	2 50 %	14 60.9 %	28 47.5 %	1 20 %	3 33.3 %	0 0 %	4 100 %	0 0 %	52 50 %
<b>Disagree</b>	1 25 %	1 4.3 %	2 3.4 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	4 3.8 %
<b>Strongly disagree</b>	0 0 %	1 4.3 %	1 1.7 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	2 1.9 %
<b>Total</b>	4 100 %	23 100 %	59 100 %	5 100 %	9 100 %	0 100 %	4 100 %	0 100 %	104 100 %

Table 100: Double standards in qualifications and work performance make it more difficult for Minority, Woman, Disadvantaged, Small, or LGBTQ businesses to win bids or contracts.

	<i>Owners' Minority Status</i>								<i>Total</i>
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Strongly agree</b>	0 0 %	3 5.3 %	44 42.7 %	3 21.4 %	5 33.3 %	1 33.3 %	1 16.7 %	0 0 %	57 23.1 %
<b>Agree</b>	1 2.1 %	6 10.5 %	28 27.2 %	2 14.3 %	3 20 %	0 0 %	1 16.7 %	0 0 %	41 16.6 %
<b>Neither agree nor disagree</b>	26 54.2 %	34 59.6 %	26 25.2 %	7 50 %	7 46.7 %	0 0 %	3 50 %	1 100 %	104 42.1 %
<b>Disagree</b>	9 18.8 %	9 15.8 %	3 2.9 %	1 7.1 %	0 0 %	1 33.3 %	1 16.7 %	0 0 %	24 9.7 %
<b>Strongly disagree</b>	12 25 %	5 8.8 %	2 1.9 %	1 7.1 %	0 0 %	1 33.3 %	0 0 %	0 0 %	21 8.5 %
<i>Total</i>	48 100 %	57 100 %	103 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	247 100 %

Table 101: The City of Frederick is generally accommodating to the language needs of its vendor community.

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Strongly agree</b>	8 16.7 %	1 1.8 %	7 6.9 %	0 0 %	1 6.7 %	1 33.3 %	0 0 %	0 0 %	18 7.3 %
<b>Agree</b>	12 25 %	11 19.3 %	12 11.9 %	2 14.3 %	1 6.7 %	1 33.3 %	1 16.7 %	0 0 %	40 16.3 %
<b>Neither agree nor disagree</b>	27 56.2 %	45 78.9 %	78 77.2 %	12 85.7 %	11 73.3 %	1 33.3 %	5 83.3 %	1 100 %	180 73.5 %
<b>Disagree</b>	0 0 %	0 0 %	2 2 %	0 0 %	2 13.3 %	0 0 %	0 0 %	0 0 %	4 1.6 %
<b>Strongly disagree</b>	1 2.1 %	0 0 %	2 2 %	0 0 %	0 0 %	0 0 %	0 0 %	0 0 %	3 1.2 %
<b>Total</b>	48 100 %	57 100 %	101 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	245 100 %

Table 102: Sometimes, a prime contractor will contact a Minority, Woman, Disadvantaged, Small, or LGBTQ business to ask for quotes but never give the proposal sufficient review to consider giving that firm the award.

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Strongly agree</b>	1 2.1 %	5 8.8 %	30 28.8 %	3 21.4 %	7 46.7 %	1 33.3 %	1 16.7 %	0 0 %	48 19.4 %
<b>Agree</b>	0 0 %	7 12.3 %	22 21.2 %	2 14.3 %	4 26.7 %	0 0 %	1 16.7 %	0 0 %	36 14.5 %
<b>Neither agree nor disagree</b>	34 70.8 %	37 64.9 %	49 47.1 %	8 57.1 %	2 13.3 %	1 33.3 %	3 50 %	1 100 %	135 54.4 %
<b>Disagree</b>	6 12.5 %	6 10.5 %	1 1 %	1 7.1 %	2 13.3 %	0 0 %	1 16.7 %	0 0 %	17 6.9 %
<b>Strongly disagree</b>	7 14.6 %	2 3.5 %	2 1.9 %	0 0 %	0 0 %	1 33.3 %	0 0 %	0 0 %	12 4.8 %
<b>Total</b>	48 100 %	57 100 %	104 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	248 100 %

Table 103: Sometimes, a prime contractor will include a Minority, Woman, Disadvantaged, Small, or LGBTQ subcontractor on a bid to meet participation goals, then drop the company as a subcontractor after winning the award.

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Strongly agree</b>	1 2.1 %	4 7.1 %	31 29.8 %	3 21.4 %	7 46.7 %	1 33.3 %	1 16.7 %	0 0 %	48 19.4 %
<b>Agree</b>	2 4.2 %	9 16.1 %	22 21.2 %	2 14.3 %	3 20 %	0 0 %	1 16.7 %	0 0 %	39 15.8 %
<b>Neither agree nor disagree</b>	32 66.7 %	38 67.9 %	47 45.2 %	8 57.1 %	4 26.7 %	1 33.3 %	3 50 %	1 100 %	134 54.3 %
<b>Disagree</b>	5 10.4 %	4 7.1 %	2 1.9 %	0 0 %	1 6.7 %	0 0 %	1 16.7 %	0 0 %	13 5.3 %
<b>Strongly disagree</b>	8 16.7 %	1 1.8 %	2 1.9 %	1 7.1 %	0 0 %	1 33.3 %	0 0 %	0 0 %	13 5.3 %
<b>Total</b>	48 100 %	56 100 %	104 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	247 100 %



Table 104: In general, Minority, Woman, Disadvantaged, Small, or LGBTQ businesses tend to be viewed by Non-minority/woman/disadvantaged/small/LGBTQ businesses as less competent than non-minority male-owned businesses.

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Strongly agree</b>	0 0 %	4 7 %	42 40.4 %	3 21.4 %	6 40 %	1 33.3 %	1 16.7 %	0 0 %	57 23 %
<b>Agree</b>	2 4.2 %	18 31.6 %	27 26 %	5 35.7 %	3 20 %	0 0 %	2 33.3 %	0 0 %	57 23 %
<b>Neither agree nor disagree</b>	25 52.1 %	25 43.9 %	34 32.7 %	5 35.7 %	4 26.7 %	1 33.3 %	3 50 %	1 100 %	98 39.5 %
<b>Disagree</b>	12 25 %	8 14 %	0 0 %	0 0 %	2 13.3 %	0 0 %	0 0 %	0 0 %	22 8.9 %
<b>Strongly disagree</b>	9 18.8 %	2 3.5 %	1 1 %	1 7.1 %	0 0 %	1 33.3 %	0 0 %	0 0 %	14 5.6 %
<b>Total</b>	48 100 %	57 100 %	104 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	248 100 %

Table 105: I believe that some non-minority prime contractors only utilize Minority, Woman, Disadvantaged, Small, or LGBTQ companies when required to do so by The City of Frederick.

	Owners' Minority Status								Total
	Non-Minority	Woman	Black	Asian	Hispanic	American Indian	Bi-Racial or Multi-Racial	Publicly Traded Company	
<b>Strongly agree</b>	1 2.1 %	7 12.3 %	43 41.3 %	5 35.7 %	7 46.7 %	1 33.3 %	1 16.7 %	0 0 %	65 26.2 %
<b>Agree</b>	5 10.4 %	14 24.6 %	20 19.2 %	1 7.1 %	2 13.3 %	0 0 %	1 16.7 %	0 0 %	43 17.3 %
<b>Neither agree nor disagree</b>	33 68.8 %	34 59.6 %	39 37.5 %	7 50 %	5 33.3 %	1 33.3 %	4 66.7 %	1 100 %	124 50 %
<b>Disagree</b>	2 4.2 %	2 3.5 %	1 1 %	0 0 %	1 6.7 %	0 0 %	0 0 %	0 0 %	6 2.4 %
<b>Strongly disagree</b>	7 14.6 %	0 0 %	1 1 %	1 7.1 %	0 0 %	1 33.3 %	0 0 %	0 0 %	10 4 %
<b>Total</b>	48 100 %	57 100 %	104 100 %	14 100 %	15 100 %	3 100 %	6 100 %	1 100 %	248 100 %

# APPENDIX I

## City of Frederick Disparity Study Detailed Availability Analysis

## APPENDIX I – Detailed Availability by Industry Category

The tables in Appendix I (Tables I-1 through I-5) present numbers on MWBE availability corresponding to the availability percentages in the Quantitative Analysis chapter. The availability methodology for creating the Master Vendor table for these availability tables is contained in the Quantitative Analysis chapter.

Table I-1  
*Availability Estimates - Construction*  
In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VI-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	Number	Percent
African American	149	19.95%
Asian American	26	3.48%
Hispanic American	64	8.57%
Native American	11	1.47%
<b>Total MBE</b>	<b>250</b>	<b>33.47%</b>
Women	56	7.50%
Unidentified MWBE	3	0.40%
<b>Total MWBE</b>	<b>309</b>	<b>41.37%</b>
Non-MWBE	438	58.63%
<b>Total</b>	<b>747</b>	<b>100.00%</b>

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Table I-2  
*Availability Estimates – Architecture & Engineering*  
In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VI-WV-PA CSA  
City of Frederick Disparity Study

Race/Ethnicity	Number	Percent
African American	49	13.96%
Asian American	42	11.97%
Hispanic American	12	3.42%
Native American	4	1.14%
<b>Total MBE</b>	<b>107</b>	<b>30.48%</b>
Women	31	8.83%
Unidentified MWBE	2	0.57%
<b>Total MWBE</b>	<b>140</b>	<b>39.89%</b>
Non-MWBE	211	60.11%
<b>Total</b>	<b>351</b>	<b>100.00%</b>

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Table I-3  
*Availability Estimates – Professional Services*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VI-WV-PA CSA  
 City of Frederick Disparity Study

<b>Race/Ethnicity</b>	<b>Number</b>	<b>Percent</b>
African American	263	18.88%
Asian American	46	3.30%
Hispanic American	31	2.23%
Native American	13	0.93%
<b>Total MBE</b>	<b>353</b>	<b>25.34%</b>
Women	75	5.38%
Unidentified MWBE	12	0.86%
<b>Total MWBE</b>	<b>440</b>	<b>31.59%</b>
Non-MWBE	953	68.41%
<b>Total</b>	<b>1393</b>	<b>100.00%</b>

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Table I-4  
*Availability Estimates – Other Services*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VI-WV-PA CSA  
 City of Frederick Disparity Study

<b>Race/Ethnicity</b>	<b>Number</b>	<b>Percent</b>
African American	364	15.57%
Asian American	72	3.08%
Hispanic American	64	2.74%
Native American	31	1.33%
<b>Total MBE</b>	<b>531</b>	<b>22.71%</b>
Women	134	5.73%
Unidentified MWBE	16	0.68%
<b>Total MWBE</b>	<b>681</b>	<b>29.13%</b>
Non-MWBE	1657	70.87%
<b>Total</b>	<b>2338</b>	<b>100.00%</b>

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Table I-5  
*Availability Estimates – Goods & Supplies*  
 In the Relevant Market – Washington-Baltimore-Arlington, DC-MD-VI-WV-PA CSA  
 City of Frederick Disparity Study

<b>Race/Ethnicity</b>	<b>Number</b>	<b>Percent</b>
African American	82	7.55%
Asian American	14	1.29%
Hispanic American	12	1.10%
Native American	8	0.74%
<b>Total MBE</b>	<b>116</b>	<b>10.68%</b>
Women	47	4.33%
Unidentified MWBE	10	0.92%
<b>Total MWBE</b>	<b>173</b>	<b>15.93%</b>
Non-MWBE	913	84.07%
<b>Total</b>	<b>1086</b>	<b>100.00%</b>

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